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Leaflet Regarding Rules of Publication.—CALIFORNIA AND WESTERN MEDICINE has prepared a leaflet explaining its rules regarding publication. This leaflet gives suggestions on the preparation of manuscripts and of illustrations. It is suggested that contributors to this Journal write to its office requesting a copy of this leaflet.

DEPARTMENT INDEX

(Itemized Index of Articles is printed on Front Cover)

EDITORIALS†

STATE HUMANE POUND ACT (INITIATIVE NO. 2)

Balloting Results.—CALIFORNIA AND WESTERN MEDICINE's issue for November will be in press by November 8, election day, on which account nothing but a guess can now be hazarded concerning the decision of California's electorate as to the "State Humane Pound Act," known as Initiative No. 2.

It is our hope, however, that this measure, so inimical to the real interests of public health in our State, will have by then gone down to a deserved defeat. For the moment, comment will be limited to some features of the campaign just closing against the proposed initiative.

* * *

Set-up of the Organized Effort Against Proposition No. 2.—To some physicians, it may have appeared that the organized effort brought into being to oppose the "State Humane Pound Act" was somewhat slow in getting under way. This impression could easily have been gained, because certain California newspapers, from the very beginning, not only gave much space to the Act's proponents, but were more than reluctant to accept "copy" in which the fallacies of the initiative were exposed.

Nevertheless, here and there, other newspapers were generous in accepting such articles, and also in printing editorial comment against the proposed law.

The fight to oppose Initiative No. 2 was carried on in reality in its initial stages, by organization of public-spirited citizens (college presidents, church prelates, attorneys, physicians and others), who founded the California Society for the Promotion of Medical Research. That resourceful organization alone not only secured resolutions from national and state groups condemning the misnamed "Humane Pound Act," but also carried on an intensive educational campaign; providing speakers before assemblies, and bill poster and hand literature, and sending newspaper copy to the daily press. Also spot and other radio announcements. Much credit, therefore, is due the many workers of that efficient organization.

† Editorials on subjects of scientific and clinical interest, contributed by members of the California Medical Association, are printed in the Editorial Comment column which follows.

The California Medical Association Council, too, on behalf of the members of the California Medical Association, gave the sum of $5,000 to the California Society for the Promotion of Medical Research for use in meeting expenses other than salaries.** In addition, among the component medical societies, that of Alameda County set the pace by allocation to the California Society, for the same purpose, the welcome sum of $2,500, or $5.00 for each of its members. Other county units, as both the Los Angeles and San Francisco County Medical societies, also made generous donations.

* * *

Program of the Council's Special Committee. The Council, besides, appointed a special committee to devise and carry on, through the Central Office of the California Medical Association, the distribution and follow-up work in the sending of fifty post cards to every one of the six thousand California Medical Association members.* It is not necessary to comment on this post-card activity, because all members received the explanatory and other literature, and should, therefore, be familiar with the parts they themselves have taken in that important phase of the work.

Special appreciation and acknowledgment, however, must be made to the Woman's Auxiliary to the California Medical Association, and to the Public Health League of California for the generous and efficient services rendered by their members.† The success of the post-card campaign was predicated upon the support those organizations offered to give, and the California Medical Association is indebted for the aid so willingly and ably rendered.‡

* * *

"Life's" Contribution to the Cause.—A particularly pleasant experience, in this battle against Initiative No. 2, was the receipt of a copy of the October 24 issue of *Life,* presenting on pages 46–53 a pictorial story with brief explanatory text, calling attention to this evil that demanded the opposition of all right-thinking citizens, and worthy of the best ideals of the press. A copy of *Life* was sent to every county medical society and to all daily newspapers in California; and county societies were urged to have their members place a marked copy on reception-room tables, and to request druggists and other trade people to place the pictures inside their display windows for the further enlightenment of the public.

Many members of the California Medical Association also sent wires of appreciation to the editors of *Life;* and now CALIFORNIA AND WESTERN MEDICINE, as the official organ of the Association, likewise extends its compliments to the editors of that national publication, and expresses a hearty appreciation of this notable public health service, so splendidly rendered by naturally alert *Life.*

* * *

Organization Experiences Should Be of Future Value.—Much more could be written concerning the "State Humane Pound Act." As previously remarked, we do not know, at this time of writing, what will be the final tally on Number 8 of ballots expressive of California's citizenry. We can only hope that the disguised movement will be defeated, and we believe that the Initiative will not become a law. If, however, it is enacted, then we shall surely gird ourselves afresh, and the stronger, to meet in future all similar onslaughts against public health interests; in full faith that, in the end, right will prevail. And once again, the thanks of the California Medical Association to all who participated in the battle against this 1938 inhuman "State Humane Pound Act—No. 2"!

DEL MONTE ANNUAL SESSION
MAY 1–4, 1939

Del Monte Always Attractive for Annual Sessions.—During many and recent years, a favorite yearly gathering place for members of the California Medical Association has been the Hotel Del Monte, at Del Monte in the historic County of Monterey.

The next annual session will chronicle the sixty-eighth year of existence of the California State Medical Association, a constituent state unit of the American Medical Association having, with Massachusetts and Ohio, seven members in the American Medical Association House of Delegates and being exceeded in number only by New York with its nineteen members, Pennsylvania with eleven, and Illinois with nine; a statistic or two that will indicate the numerical place which California occupies in the membership rosters of the national organization.

It has been only a brief two years since the sixty-sixth annual session of the California Medical Association convened at Del Monte, and an early return there will indicate the Hotel's popularity for convenient location, pleasant accommodations and a most inviting environment.

* * *

Hotel Reservations Should Be Made.—As is well known, the management of the Hotel Del Monte may always be relied upon to make every effort to provide accommodations in the hotels on the Monterey Peninsula, and members of the Association who have planned to attend should early send in their written requests for reservations, addressing the Hotel Del Monte, Del Monte, California. These requests will be filed, in the order of their receipt, and in due time, and with an effort to meet individual preferences, the allocations will be made.

* * *

Program of Scientific Features.—As in the past the scientific program of the annual session of 1939 will be divided in respect to three activities:

** Subsequently, by favorable mail vote of the California Medical Association Council, an additional $2,000 was granted, making $7,000 in all, so given.

* For purposes of record, the six-page circular of instructions is printed in this issue, on advertising page 34.

† Acknowledgment must be given to Dr. John W. Crossan of Los Angeles, who represented the Association Secretary in supervising the work in the counties south of the Tehachapi.

‡ An example of the manner in which a county auxiliary helped appears in this issue, in the Department of Public Relations department, on page 401, in a letter from San Diego.

(1) the General Sessions; (2) the Section Meetings, and (3) the Scientific Exhibits.

The General Meetings are under the combined jurisdiction of the Council, both as to number and nature of programs. The first general meeting will be held on Monday morning, featuring the address of President W. W. Roblee, and one or two addresses by Guest Speakers. One other general meeting will probably be a Clinical-Pathological Conference led by speakers who are guests, and possibly a third general meeting will be devoted to medical organization problems.

* * *

Prospective Essayists Should Write to Section Secretaries.—Each of the twelve scientific sections of the Association—(1) Anesthesiology; (2) Dermatology and Syphilology; (3) Eye, Ear, Nose, and Throat; (4) General Medicine; (5) General Surgery; (6) Industrial Medicine and Surgery; (7) Neuropsychiatry; (8) Obstetrics and Gynecology; (9) Pathology and Bacteriology; (10) Pediatrics; (11) Radiology, and (12) Urology—will present a varying number of papers, of particular interest to members in the specialties or in general medicine and surgery.

The officers of each scientific section, whose names and addresses are printed in every issue of California and Western Medicine, on advertising page 6, are now engaged in working up their programs. Members of the Association, who have papers in mind which they wish to present at the next annual session, should write at once to the proper Section Secretary, giving the title of the topic, and a brief outline of the nature of the paper. Because decisions on the program will be made at an early day, it is important that all essayists should send the necessary memorandum to the Section Secretary within the next week or so. The State Committee on Scientific Work also urges all prospective essayists to act promptly in these matters.

* * *

Scientific Exhibits Should Be in Preparation. What has been stated concerning section papers, applies also to scientific exhibits. Members of the California Medical Association who desire to present, in the form of exhibits, results of their studies and observations, should communicate with the Association Secretary, at the same time sending a copy of the letter to the proper section secretary. Here again, an outline of the nature of the exhibit, the facts it is intended to illustrate and emphasize, the approximate space and material required, all should be briefly indicated. In that way, the plans for the housing of the scientific, as well as the technical or commercial exhibits, can go forward without undue delay.

* * *

Prompt Coöperation Is Requested.—As already stated, the California Medical Association Committee on Scientific Work (whose names are likewise to be found in each issue of this magazine, on advertising page 2), and also the section presidents and secretaries, request all members who are interested in these matters to give the same their early attention, thus insuring, through enthusiastic mutual aid, the groundwork for a session in 1939 that should prove the most attractive and successful ever convened by the California Medical Association.

POSTGRADUATE ACTIVITIES OF THE CALIFORNIA MEDICAL ASSOCIATION

California Medical Association's Five-Year Study Program.—Under the chairmanship of Dr. John C. Ruddock of Los Angeles, the California Medical Association's Standing Committee on Postgraduate Activities last year embarked upon a five-year program having, as its basic purpose, the offering and bringing to county societies (acting singly or in groups), of postgraduate conferences; along lines as outlined in the Postgraduate Supplement of the October issue of California and Western Medicine.

In so ambitious an effort, with but few previous local experiences to serve as a guide for best paths of approach in the new work, it is not to be wondered at that the first year's efforts should have fallen considerably short of what, it is to be hoped, future years will record.

* * *

October Postgraduate Supplement.—With the October issue of the Official Journal, Program II of the "Five-Year Study Program for Graduates in Medicine" has gone forward, carrying its message to the six thousand members of the California Medical Association. On pages 2 and 3, the Supplement, as members may have noted, gives an index of the 126 courses which are briefly described on pages 7-15.

The procedure to be followed in providing such courses is given on page 5, under the heading, "General Information."

The attention of each of the thirty-nine component county societies of the State Association, is again called to this important new-feature work, with the hope expressed, on behalf of the California Medical Association Committee, that each county medical society, if it has not already done so, will appoint its own Committee on Postgraduate Conference, to work with similar groups in adjacent counties, having as an objective the institution of a Postgraduate Conference for the district.

* * *

Steps to Keep in Mind.—A perusal of the Foreword and General Information paragraphs of the October Supplement will reveal the procedure methods which, experience has shown, are apt to ensure the most success.

It is important to remember that each local committee should consist of physicians who not only want to try out Postgraduate Conferences, but who are willing to give of their best personal efforts to make them a success.

To be kept in mind, also, are other items, such as that: the preliminary work must be done by the local committees, who will decide what county societies are to be the active sponsors of the Conference; what county societies, not too far distant

are also to receive invitations for attendance of members; what postgraduate courses are most needed or of possible greatest interest; whether the conferences shall be of one, two or three-day periods; what hours of the day, and where to be held; the sources of supply of the clinical material for the guest speakers; and whether the courses of the present year are to be preliminary to others of a more specialized nature, to be followed up in the next several years, and so on.

* * *

Successful Conferences of San Joaquin and San Diego Societies.—What can be accomplished has been demonstrated by the San Joaquin County Medical Society, which unit, under the enthusiastic chairmanship of Dr. C. A. Broaddus, in September carried through its fourth annual Graduate Study Conference—as reported on in last month's issue, on page 341; while in October, despite unforeseen handicaps, a very successful Conference was held in San Diego under the sponsorship of a committee, on which Doctors W. H. Geistweit, Jr., and Lyell C. Kinney gave splendid service.

These successful conferences of San Joaquin and San Diego are mentioned to prove that equally beneficent objectives could be realized in other counties of the State did only the will exist to hold such Postgraduate Conferences.

* * *

California Medical Association's Postgraduate Committee Will Assist.—The State Committee, as announced in the October Supplement, is anxious to assist, and its members hope that local committees will be brought into being and that postgraduate conference plans will materialize in the near future in many districts of California, so that a progress report of real merit may be given at the next annual session of the State Association.

COURT'S DEFINITION OF CHIROPRACTIC—A PROPOSED CHIROPRACTIC PRACTICE ACT INITIATIVE

Cultist Healing Art Practitioners Never Tire.—Cultist medicine is increasing in its legislative efforts. If it is not one cult, it is another. Depending upon the commonwealth, and the extent to which this, that or the other group of practitioner cultists may have gotten a foothold, one may see a state confronted with well-organized naturopaths, physiotherapists or what not, seeking to secure legal recognition to practice their "art," be "that" what it may.

* * *

California Is a "Multiple-Board" State.—California is one of the states of the Union that has gone through this sad experience. As a consequence, it is a "multiple-board state," namely, a commonwealth that has seen fit to grant legal recognition, not only to nonsectarian practitioners of the healing art—doctors of medicine—but to other groups that are sectarian—the osteopaths and the chiropractors.

Proposed Chiropractic Act Initiative.—The California chiropractic group has been somewhat unhappy with its initiative law, and for several reasons. Thus, as an initiative law, all its errors are "frozen"; that is, the law cannot be changed except by a favorable electorate vote of the entire State on amendments that would be proposed for elimination of the initial statutory mistakes. That is what the California group of chiropractors, of whom there are at present about three thousand licensed in the State, now propose to do; and that, in spite of the great expense of securing the more than 186,000 signatures necessary to obtain placement of an initiative act on a state election ballot.

During the last month, such a list of signatures of citizens, legally acceptable to the Secretary of State, has been filed, and at the state election in 1940 (or before, if a special state election should be held prior to 1940) the chiropractic initiative will have a place on the ballot. The proponents of that initiative found that the necessary number of legal signatures was lacking on August 15, 1938, and therefore, in order not to lose the value of signatures previously gathered, as would happen by filing on or before that date, they continued to seek signatures until an adequate number was secured, and then filed and were certified to, as before stated, not for the November 8, 1938, election, but for the first succeeding state election.

In due time, a copy of the proposed chiropractic act will be given space in CALIFORNIA AND WESTERN MEDICINE.

* * *

Why the Proposed Chiropractic Initiative Amendments.—The restlessness of the chiropractic group, under the existing law, with its loose requirements on preliminary and other education, and its worse definition of what chiropractic is, can be appreciated by reading the opinion of Judge John J. Van Nostrand, originally handed down on September 28, 1936, and only recently (October 6) put into legal force. Comment concerning this opinion was made in CALIFORNIA AND WESTERN MEDICINE on pages 414-419 in its issue for November, 1936.

* * *

More Anon on This Topic.—The subject is called to the attention of county society committees on public policy and legislation, in the hope that, from time to time, members of component societies may be further informed concerning the issues involved, particularly as they are related to public health and medical practice standards.

Other State Association and Component County Society News.—Additional news concerning the activities and work of the California Medical Association and its component county medical societies is printed in this issue, commencing on page 392.

EDITORIAL COMMENT†

THE "SCOOP" AS A SOURCE OF BACTERIAL CONTAMINATION OF ICE CREAM

Routine sampling of market ice cream for bacteriological counts is generally an established health department procedure. The San Francisco ordinance regarding milk and ice cream has legally determined that ice cream, when sold by manufacturer, distributor or retailer, shall not contain nonpathogenic bacteria in excess of 50,000 per gram. The prevalence of higher bacterial counts, however, in market ice creams in San Francisco made further investigation necessary as to all possible sources of contamination. Several sources were ascertained, but the most fruitful appeared to be the "scoop and its washings." It was the rule, rather than the exception, to find receptacles for the ice cream scoops to be infrequently cleaned throughout the day, the water intended for washing scoops unchanged, and chemical or other methods of sterilization rarely used. In the survey conducted, 487 samples of scoop washings were obtained for bacteriologic analysis. In 124, or approximately 25 per cent, the bacterial counts were under 10,000 cubic centimeters; 266 (or 54 per cent), over 100,000 bacteria per cubic centimeter; and 97, or approximately 20 per cent, over 1,000,000 bacteria per cubic centimeter. To obviate such high bacterial counts, a sanitary code for the use and cleansing of ice-cream scoops was promulgated. This code requires several daily washings of the scoop and its receptacle with soap and hot water; the frequent changing of water in the receptacle; the washing of the scoop in clean running water, preferably hot, before being used for service; and, finally, the avoidance of direct handling of the lower portion of the scoop by the attendant. The adoption of this sanitary code, the checking by bacterial sampling and examination and ordinary inspection, will serve to reduce materially this source of contamination of a universally used food.

Department of Public Health,
101 Grove Street.

J. C. GEIGER,
San Francisco.

DO ALIEN PROTEINS MULTIPLY IN THE ANIMAL BODY?

The possibility that certain antigens are autocatalytic colloids, capable of multiplying (or, of being multiplied), in symbiosis with animal tissues, is a speculative hypothesis now under serious consideration by immunologic theorists. The latest experimental evidence in support of this theory is a quasi-proliferation of tetanus toxin on intramuscular injection into rabbits or guinea pigs. Doctors Zuger and Friedemann, [1] of the Division of Bacteriology, Jewish Hospital, Brooklyn, for example, noted that from ten to twenty times the calculated therapeutic dose of tetanus antitoxin was required to protect guinea pigs or rabbits if multiple lethal doses of tetanus toxin were injected intramuscularly, rather than intravenously, as in routine titrations. Thus, their standard dose (10 MLD) tetanus toxin injected intravenously, required but 0.00025 cubic centimeters, commercial antitoxin for complete neutralization. The same dose, however, given intramuscularly required ten times this dose, or 0.0025 cubic centimeters commercial antitoxin. They concluded from this observation that there is some hitherto unsuspected multiplication, activation, or "potentiation" of tetanus toxin in guinea pig muscles.

To test this conclusion 200 MLD tetanus toxin was ground up with five grains of exsanguinated guinea pig muscle. The resultant emulsion was centrifuged, and the supernatent fluid injected intramuscularly into guinea pigs, control injections being made with the same calculated dose of unaltered tetanus toxin. In their controls 1 cubic centimeter, 1:4000 dilution of unaltered tetanus toxin was the minimum lethal dose; the "muscle toxin," however, requiring but an eighth of this dose, or 1 cubic centimeter of a 1:32,000 dilution to produce the same lethal effects. The natural toxin, therefore, had apparently been increased eightfold in toxicity as a result of contact or symbiosis with muscle tissues. The "muscle toxin," however, was rapidly "depotentiated" on intravenous injection, and, thus tested, required only the usual amount of commercial antitoxin for complete neutralization.

Probably the simplest phenomenon of this type thus far studied by immunochemists is the four- to eightfold quasi-proliferation of proteins under the influence of certain relatively mild proteolytic enzymes. Dr. Harold C. Sox[2] of Stanford University, for example, mixed one volume horse serum with twenty volumes canine leucocytic extract. Titration of the mixture by means of anti-horse rabbit precipitins after eighteen hours' incubation gave readings suggesting a four- to eightfold *in vitro* multiplication of horse proteins. Doctor Sox's explanation of this apparent multiplication assumed that "under the influence of leucocytic proteolysin each horse protein molecule is hydrolysed into from four to eight daughter protein molecules, each daughter molecule being of approximate horse protein specificity." Doctor Sox subsequently demonstrated similar "depolymerization" or "symmetrical hydrolysis" of horse proteins on intravenous injection into dogs.

The apparent proliferation of alien (or denatured tissue), colloids of greatest current clinical interest, however, is the quasi-proliferation of B. welchi toxin, or the "formation of secondary hema-toxic products," on intratibial injection into rabbits. About ten years ago, Doctors Torrey and Kahn,[3] of Cornell Medical College, found that they could inject 0.5 cubic centimeter of a non-hemolytic B. welchii filtrate intravenously into rabbits without producing a very appreciable anemia. All animals

† This department of CALIFORNIA AND WESTERN MEDICINE presents editorial comments by contributing members on items of medical progress, science and practice, and on topics from recent medical books or journals. An invitation is extended to all members of the California Medical Association to submit brief editorial discussions suitable for publication in this department. No presentation should be over five hundred words in length.

1 Zuger, Bernard, and Friedemann, Ulrich: Proc. Soc. Exper. Biol. and Med., 38:283 (Mar.), 1938.

2 Sox, Harold C., et al.: Proc. Soc. Exper. Biol. and Med., 27:72, 1929; J. Immunol., 21:409, 1931.

3 Torrey, John C., and Kahn, Morton C.: Am. J. Path., 5:117, 1929.

survived this injection. The same dose, however, injected into a single bone marrow (tibia) caused progressive degenerative changes in all bone marrows of the body, with ultimate death due to an anemia resembling pernicious anemia in man. This observation has been confirmed by Dr. S. D. Beard[4] and his associates of Pearl River, New York. Here tetanus toxin brought into symbiosis with bone marrow cells was apparently "potentiated" or otherwise changed to an organ-specific hormone of increased toxicity. This toxic hormone caused secondary degenerative lesions in all bone marrows of the body.

The theory that certain alien proteins (or denatured tissue proteins), are autocatylitic colloids, multiplying or being multiplied in symbiosis with living tissue cells, furnishes a plausible explanation for various phenomena of this type. This theory, however, is by no means the only plausible explanation of such phenomena, and must be subjected to much more critical study before its adoption in routine clinical logic. Thus far, the most convincing evidence in support of this theory is drawn from the environmental "transformations" of bacteria, environmentally induced bacteriophage, lysozyme, or carbohydrate specificity multiplying (or being multiplied), in symbiosis with bacterial cells. The reported work with tetanus and B. welchi toxins strongly suggest, but by no means prove, similar colloidal symbiotic processes in animal tissues.

Box 51.

W. H. MANWARING,
Stanford University.

4 Beard, S. D., Clark, G. W., and Moses, Max J.: Proc. Soc. Exper. Biol. and Med., 26:13, 1928.

Rabies: Report of Twelve Cases, with Discussion of Prophylaxis.—Maurice L. Blatt, Samuel J. Hoffman, and Maurice Schneider, Chicago (*Journal of the American Medical Association*, August 20, 1938), discuss the twelve cases of rabies admitted to the Cook County Hospital between 1929 and 1937. All proved fatal. The diagnosis in each case was confirmed by necropsy. The incubation period for the patients varied from two weeks to two months. The closer the site of the bite to the central nervous system the shorter was the incubation period. Wounds made by the bites of animals should immediately be cauterized with nitric acid. The Pasteur treatment or one of its modifications should be instituted in accordance with rules outlined and accepted. The twelve persons whose cases are reported died after suffering great agony and might have been saved if adequate prophylactic measures had been instituted immediately. They were admitted to the hospital after having been ill from two to seven days and anywhere from two weeks to two months after they had been bitten by dogs. Stringent enforcement of regulations governing ownership, licensure, muzzling and leashing of dogs would have prevented the bites. The extent of this problem is evidenced by the fact that in the state of Illinois alone 18,466 dog bites were reported to the State Department of Public Health in 1936 and that there were ten deaths from rabies. A knowledge of similar facts would divulge a tremendous loss of time and of lives of human beings and animals in the United States from a preventable cause. When such knowledge becomes public it will be of inestimable educational value in the eradication of this dreadful malady.

ORIGINAL ARTICLES

INDUCTION OF LABOR: SOME DIFFICULTIES*

By WILLIAM BENBOW THOMPSON, M.D.
Los Angeles

DISCUSSION *by Henry A. Stephenson, M. D., San Francisco; Donald G. Tollefson, M. D., Los Angeles; John W. Sherrick, M. D., Oakland.*

IN April, 1931, Dr. J. Morris Slemons[1] discussed "The Induction of Labor at Term" before the Los Angeles Obstetrical and Gynecological Society, and presented the results from 132 cases of rupturing the bag of waters in order to secure the onset of labor. In the same month, and stimulated by a prior enthusiastic letter from Doctor Slemons to Dr. J. W. Williams, Guttmacher and Douglas[2] of Johns Hopkins reported 120 such inductions. With the evident approbation of the leaders of the conservative school, the method soon was widely adopted. Articles detailing the findings by Morton[3] of Lynch's Clinic with 150 cases, Vruwink of Los Angeles[4] with 128 cases, Stern[5] of Philadelphia with eighty-five cases, Plass and Seibert[6] of Iowa City with 681 cases, and Mathieu and Holman[7] of Portland with 750 cases, appeared in the literature. All of these papers admit occasional failures or difficulties, but the general impression to be gained from a casual reading is that the age-old problem of the obstetrical attendant of how best to promote shorter and easier labor is practically solved. Only a close and critical study reveals the pitfalls that would entrap the unskilled and unwary. Hence it seems worth while, at this time, to emphasize the unfortunate results lest a valuable and practical procedure fall into disrepute through inappropriate application.

METHOD OF SLEMONS

The method proposed by Slemons was (1) castor oil, 2 ounces, with quinine, 10 grains; (2) four hours later rupture of the membranes; (3) intranasal application of a solution of pituitary extract until regular contractions were established. No one of these was an an innovation. Castor oil and quinine as an "obstetrical cocktail" has a more or less honorable ancient history; Denman[8] in 1802 advocated rupture of membranes to institute labor; and Hofbauer[9] in 1927 suggested the nasal route for administering pituitary extract. The logical combination of these steps, however, appealed to Slemons, and, despite various modifications, the method is essentially as he proposed. Guttmacher and Douglas found that, by omitting the pituitary extract, both the "latent period" before the onset of contractions and the labor itself were somewhat lengthened, while rupture of membranes alone, in two cases, prolonged the latent period to a dangerous degree. Morton suggested the vaginal instillation of 30 cubic centimeters of 4 per cent aqueous solution of mercurochrome as advocated by Mayes[10] for normal labor. Vruwink reduced the amount of quinine, reserved the pituitary ex-

* Read before the Obstetrics and Gynecology Section of the California Medical Association at the sixty-seventh annual session, Pasadena, May 9–12, 1938.

tract application for those in whom labor did not promptly follow the rupture of the membranes, and advocated the abandonment of the practice of stripping the membranes from the area about the internal os. This last measure is not to be found in Slemon's paper, although it was, I believe, a portion of his technique. Mathieu and Holman now utilize rupture of membranes only if labor has not been initiated by three or four injections of pituitary extract at hourly intervals, and also omit the preliminary castor oil and quinine. They rely chiefly upon the pituitary extract, even to the extent, in their last 114 cases, of rendering the patient asleep with 7.5 to 12 grains of pentobarbital before attempting induction. With the exception of the last given method, it will be seen that these reports may fairly be considered as giving the results of the original technique.

EVALUATION OF RESULTS

An evaluation of the results of this or any other method of conducting labor cannot rest alone upon the percentages of maternal and fetal recoveries. Also to be considered are length of labor, morbidities, injuries to the birth canal, and accidents. Taken as a unit, the reports cited may be admitted to be the acme of perfection in so far as results are concerned; that is, they are by excellent men working under excellent conditions. Uniformly, labors were found to be shorter than average. This decrease in the hours in labor will be discussed later. Despite the increased danger of intrauterine infection after rupture of membranes, morbidities were lower than the control groups. To what extent this might be due to the fact that, with very few exceptions, these patients were normal women with normal pelves, is not clearly presented, since the control groups usually were clinic averages. Studies of the cervix after induced labors have not as yet appeared, but Norman Williams,[11] who routinely inspects the cervices of his patients on the eighth or ninth day, states that it is his impression that fewer injuries requiring repair are to be found among the patients with labor so induced.

MATERNAL AND FETAL MORTALITY

No maternal mortality was reported. The hazards, so far as the mother is concerned, would appear minimal, but it must constantly be borne in mind that these articles present the best results, not average findings. Fetal deaths are infrequent, but not rare. Slemons ascribed the loss of one infant to the violent labor in a primipara, and remarked that this might have been an overstimulation from the pituitary extract. Guttmacher and Douglas lost seven infants, about average for the Hopkins Clinic. Two of these they charged to the conduct of labor. One died of an intrapartum infection after a latent period of fifty-two hours, and labor was promoted only after insertion of a bag, and terminated by manual dilitation of the cervix and craniotomy. The other suffered a prolapsed cord when the membranes were ruptured. A bag was inserted, and delivery later was spontaneous, but the child was still-born. Morton had three infant deaths, but does not clearly suggest that any of these were related to the induction. Vruwink had an instance of prolapsed cord with fetal death. Stern reported three fetal deaths, again without sufficient comment, although two followed stormy labors, and may be analogous to the death noted above by Slemons. Plass and Seibert found a fetal mortality of 3.09 per cent, and of the twenty-one infant deaths felt that only two, from prolapsed cords, were directly chargeable to the induction. Nine of their ten neo-natal deaths were among their twenty-nine prematures (under 2,500 grams). Mathieu and Holman give no details except that the corrected rate, after deducting prematures under 1,500 grams and congenital defects incompatible with life, was 0.8 per cent. One of their deaths was due to cord prolapse.

AUTHOR'S STUDY

The foregoing affords sufficient ground for an examination into the results obtained under less favorable circumstances. Accordingly, I have reviewed the records of inductions in my own practice, and have also searched the files of the hospitals to which I am admitted. The results are somewhat disheartening. I can, at present, make no reference to the percentage of deliveries that are preceded by induced labor, nor has it been possible to arrange morbidity comparisons. This discussion will be confined to a discussion of bad results after elective rupture of membranes, whether from failure of the induction itself or from improper selection of the mode of terminating pregnancy. In order to present the material frankly and critically, I am presenting each error of judgment as if it were my own. By thus assuming full responsibility, I hope to avoid the charge that I am holding some of my fellow practitioners up for censure.

CRITERIA FOR INDUCTION

The criteria whereby a patient may be deemed eligible for induction must be considered carefully. First, the patient must be at term if the induction be elective, or present some condition for which relief is best afforded by removing the burden of gestation. In the latter instance, all other considerations become secondary, and the determination of whether to select the vaginal or abdominal route of delivery is a matter not in question within the bounds of this paper. Suffice it to point out that, while Guttmacher and Douglas found the rupture of membranes method less hazardous than the results related by Morton[12] of using either Vorhees bags or bougies, the latter's series were largely cases of toxemia, and hence carried a higher incidence of potential disasters. Second, the presenting part must be well fitted into the pelvis. Only Plass and Seibert have ignored this matter in any considerable number of patients. Their material consisted of all patients adjudged at term who would permit induction, excepting only those with contracted pelves and malpositions. Three hundred twenty-two had induction with the presenting part floating, and in three hundred more the engagement was not complete. That only five prolapsed cords were encountered, with two

fetal deaths, would seem better fortune than should have been expected. Third, the cervix must be partially dilated, at least to a degree sufficient to permit ready access to the sac. Plass and Seibert again ignored this dictum, and, in thirty-two cases, found that digital or even instrumental dilatation was required in order to reach the membranes. Fourth, the cervix must be partially effaced, especially if the patient is a primigravida. This is somewhat of a moot point, since Slemons holds that, in multiparae, an uneffaced cervix offers no especial difficulties.

DATE OF TERM

To determine the date at which term is attained is in itself an art, not a science. Holmes puts it beautifully: "One of the mysteries of life will be unfolded when scientific knowledge tells us when pregnancy begins," and if one cannot state when gestation began, how can one know the moment of its ending unless Nature whispers, and then shouts, the information? The best available data are to be obtained from the cervix, plus the patient's history. When dilatation is checked closely, and effacement noted, labor is impending. But rectal examinations are sometimes uncertain, and the information thus obtained sometimes is erroneous. Hence it has occurred that, forgetting the menstrual record, elective induction has been attempted before the optimum time. It would seem a simple matter, when the error is discovered, to send the patient home until a more propitious moment, but, with the unexpected palpation of an undilated, uneffaced cervix, a peculiar phenomenon is manifested. Seemingly there occurs a complete crystalization of the reasoning processes, and the attendant, as incapable of thought as a pithed frog, mechanically proceeds with his original intention. In one instance, the head, only partially engaged, later was dislodged, and after fifteen hours of only indifferent labor, the cord prolapsed. Fortunately this was noted by a nurse, and, in frantic haste, the cervix was manually dilated or manually torn, version performed, and a small baby extracted alive.

Two other instances of failure to approximate term may be mentioned. In each there was a prolonged latent period. In the one, a primigravida, labor finally developed and was terminated by elective low forceps. The baby survived after incubator care for twelve hours, but would have been infinitely better off in its natural habitat for an additional three or four weeks. In the other, a multipara, effective labor never was present, and, after some forty-eight hours, intrapartum infection was evident, and from which the fetus succumbed. A Porro cesarean failed utterly to check the spread of infection, and the patient died on the fourth postoperative day of generalized sepsis.

POSITION OF THE PRESENTING PART

Failure of engagement of the presenting part has been partially discussed in the instance here reported of a prolapsed cord. No other similar event has, thus far, come to my attention in this review. It is evident, however, that this complication will be more frequently encountered if the position of the presenting part is ignored. Should induction be deemed necessary, in such cases an extra-ovular bag would at least conserve the amniotic fluid should the need for version arise.

BREECH POSITIONS

In this connection, the consideration of breech positions seems to be in logical sequence. Breeches are notoriously high in the pelvis at the onset of labor, and this factor, as well as the increased susceptibility to cord prolapse, militates against a favorable outcome. While the literature cited mentioned the performance of induction in breech presentations in twenty instances plus "many" by Mathieu and Holman, the fetal mortality was not low. Unless the position is proven by x-ray to be an uncomplicated breech, and unless this is well engaged, induction should not be considered lightly. My records reveal three cases, all primigravidae. In the first, all the requirements were evident, and labor was short and easy. In the second, the breech was a surprise, but the outcome was satisfactory. In the third, fetal distress became manifest, delivery was by cesarean, and the mother died of shock when hemorrhage at operation was neither well controlled nor well treated.

CERVIX

Difficulties incident to the condition of the cervix have been mentioned wherein the chief error lay in a false assumption of the attainment of term. With the exception of concern over the welfare of the premature infant, the same problems present themselves at term when dilatation and effacement cannot be demonstrated. With primigravidae, dilatation practically always occurs subsequent to adequate effacement, whereas among multiparae, dilatation to two or three centimeters may be present with little or no effacement. In the latter group, softness of the cervical ring may be substituted for effacement as a requirement.

The absence of these findings seemingly influenced the course of labor most markedly. These are the patients that, with spontaneous onset, require long hours of preliminary contractions before dilatation really gets under way, and rupturing of membranes will not miraculously change the normal expectation. Of approximately 325 records studied, there were twenty-seven at term in which labor lasted for over twelve hours. In every instance there was a notation of dilatation of "one finger" or less, or that the cervical tissues were firm and resistant. Sixteen of these were primigravidae, four of which were later subjected to cesarean section. The death of one, delivered abdominally because of fetal distress, has already been related. One of the three others, all of whom were operated upon because of cervical dystocia, had an exceedingly stormy convalescence. Several of the multiparae should be classed under the well known dystrophy-dystocia syndrome, and their previous behavior should have been of significance. One illustration is sufficient. This patient previously had had a labor described as of four days' duration. When the membranes were ruptured, the cervix was firm, and labor did not ensue despite five intranasal pituitary extract applica-

tions. After twenty hours, a bag was inserted, whereupon forcible contractions arose, with spontaneous delivery three and one-quarter hours later.

MATERNAL DEATHS

Maternal deaths, two in number, have been given in sufficient detail. Two fetal deaths also were encountered. One died on the third day, and autopsy showed only an atelectasis. Labor had been thought to be essentially normal. The other died during delivery, labor having been induced three weeks prematurely because of a generally contracted flat pelvis. Version was done after forceps attempts had failed, and the infant succumbed during the manipulation.

POSTPARTUM HEMORRHAGE

An increased incidence of postpartum hemorrhage also was evident. There were eleven cases estimated as of over 600 cubic centimeters, one of which required transfusion. This may be due, at least in part, to the rapidity of labor, since postpartum atony tends to occur after extremely short labors as well as those excessively long.

The point has been raised, in the literature cited, that the average length of labor is lessened. This logically should be the case if all requirements are met with. When the head is well engaged, the cervix soft and dilated two to three centimeters, rapid delivery is practically inevitable. Only Plass and Siebert, who made no attempt to assort their material, found the actual number of hours but little affected. Properly selected, the cases induced electively should include only those patients in whom labor would be relatively rapid under any circumstances. Hence the advantage of shorter labors is due, not alone to the induction, but partially to the selection of patients.

STORMY LABORS

In this connection, a word of caution should be added with the patient who previously has had a rapid, stormy labor. Induction probably will emphasize the uterine muscular reaction, and, once labor has begun, "not poppy, nor mandragora, nor all the drowsy syrups of the world" will reduce the turbulence within that abdomen without affecting adversely the chances of the babe; while, if unchecked, the violence predisposes toward the development of intracranial hemorrhage. Sedation, if it is to be effective, must be begun before the onset of labor rather than after. Here especially the technique of Mathieu and Holman is of great value.

EVALUATION BY OBSTETRICIANS

Those specializing in obstetrics are not as yet of one mind in regard to the merits of induction. Replies from members of the Pacific Coast Society of Obstetrics and Gynecology vary from active opposition to boundless enthusiasm. Six never employ this method electively; twelve have utilized rupture of membranes in fifty or fewer cases; and eleven report from 100 to 1,000 inductions. The total experience from this group is approximately 3,500. Here again difficulties are encountered, with one or more instances of each type previously recounted except maternal death. In practically all instances, mention is made that the selection was inopportune, that it occurred early in the obstetrician's experience, and that the same error in judgment would not be repeated.

It should be noted, and the matter deserves emphasis, that this is essentially a criticism of men rather than methods. In each difficulty noted, the fault lay in injudicious selection for the induction of that particular patient. The one possible increase in risk was pointed out by Slemons in his original article in discussing the single fetal death in his series. That death followed a violent labor, and, as has been remarked, these occur not infrequently. If preliminary sedation be employed before induction where dilatation has progressed to 3 centimeters, it is probable that this fault may be corrected. In any event, induction should not be undertaken lightly by the occasional obstetrical attendant. Good judgment and careful evaluation of possible risks are as necessary now as they have been in the past.

IN CONCLUSION

There are, and can be, no indications for elective induction of labor. The method proposed by Slemons has many meritorious features. The requirements are logical; the technique is simple; the results usually are most gratifying. However, contraindications exist unless (1) term has been reached; (2) the head is engaged; (3) the cervix is effaced; and (4) dilatation has begun. When one has questioned himself closely, and has satisfied himself that these requirements have been met, then, and only then, may elective induction be considered without an undue assumption of risk. Evasion of these requirements has given rise to hazards ranging from prolongation of the "latent period," difficulties with resistant cervices, emergency cesareans, and intrapartum infections, to stillbirths and maternal death. Because these avoidable difficulties have arisen, and in view of lay publicity given to planned delivery on a selected date, it seems timely to emphasize the fact that, when one induces labor, he becomes responsible for any and all troubles that may follow. After all, our main function is to assist the forces of nature. We cannot safely run counter to them.

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DISCUSSION

HENRY A. STEPHENSON, M. D. (490 Post Street, San Francisco).—Doctor Thompson has written a most timely paper. For the past few years there has been a tendency to attempt induction of labor in patients, in which no real indication for such induction existed. Most conservative writers have given the following indications for induction of labor: (1) To save the life of the mother; (2) in certain diseased conditions of the fetus; (3) postmaturity; and (4) contracted pelves. Certainly one should be sure that a definite indication exists before attempting induction.

The requirements for induction have been outlined by Doctor Thompson, and are so well stated that no further comment need be made. The same may be said about the pitfalls attending induction.

Doctor Thompson aptly puts the crux of the situation, in stating, "When one induces labor he becomes responsible for any and all troubles that may follow."

In making the above remarks it is not my intention to detract from the value of the method of induction which he outlines. Where one has a definite indication for induction the above outlined method is indeed the best, and the least dangerous of any which have been described to date, and in my hands has given very satisfactory results.

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DONALD G. TOLLEFSON, M. D. (511 South Bonnie Brae, Los Angeles).—Rupture of the bag of waters to induce labor has become a frequent obstetrical procedure, since Slemons first reported his series. Most of the articles have mentioned only the successes. Doctor Thompson's paper is unique in that it reports certain difficulties encountered in what has appeared to be a very simple means of electing the time of delivery near term. One cannot disagree with any of Doctor Thompson's observations, but as discussants, we should emphasize their importance.

Since the adoption of this procedure, we are less concerned about dry labors, and when induction is indicated another valuable method is available. As brought out in this discussion, the question of date of term is difficult to determine. We must depend on the changes taking place in the cervix, which has been aptly described as "the preparatory stage of labor." If this does not take place before the patient is induced, we are courting disaster. If it has occurred, the onset of labor will usually be within a short time and induction will not be necessary.

Prematurity adds to fetal mortality. It is, therefore, important that induction should not be attempted until the conditions, as outlined, are present. We then can assume that maturity has been reached.

While many writers have reported that a high percentage of patients will be eligible for induction, according to these standards, it has been my experience that only a very few patients will have the requirements for elective interference. At Los Angeles County General Hospital, we have noticed a high incidence of prolonged labors, with an increase in morbidity and mortality in cases following induction before these conditions have been obtained.

Dr. Thompson's conclusions are those which any doctor who has had experience with this method can, without question, heartily endorse.

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JOHN W. SHERRICK, M. D. (350 Twenty-Ninth Street, Oakland).—In discussing the question of difficulties encountered in the induction of labor, I want to congratulate the essayist on his excellent and exhaustive presentation of the problem. Certainly, the problem of shortening labor and making it easier has not been solved.

In inducing labor we have employed a technique varied to meet the needs of the individual case. We have given up the use of quinine, believing that it adds little of value to the operation, and thus we have avoided the dangers that it may impose. Our usual procedure is the use of castor oil, to be followed in three to four hours by stripping and rupture of the membranes, and the use of repeated small doses of pituthymin or thymophysin hypodermically. Sedation is used as indicated. If there is reasonable doubt of accomplishing productive labor, we refrain from rupturing the membranes as we feel, with the author, that in such cases it does not aid materially and does increase the hazards to both the patient and her baby.

We have used this procedure electively in a large series of cases and, with one possible exception, have found it safe, effective and a material aid in shortening labor, provided we have selected our cases wisely. We have had no maternal or fetal mortality in cases so handled, and have not felt that it adds materially to our morbidity. We feel that this method is most satisfactory in well-chosen cases, but have had considerable difficulty in those poorly chosen, and, therefore, have established rather rigid requirements before resorting to rupture of the membranes.

We have chosen cases for this procedure on practically the same basis as outlined by Doctor Thompson, namely, adequate pelvic measurements, engagement of the presenting part, reasonable softness of the cervical tissues, effacement and/or partial dilatation of the cervix. Under such conditions our results have been most satisfactory. Real difficulty has been encountered only in those cases in which the cervix was not effaced and/or the presenting part unengaged. In such we have had difficulty in securing real induction of labor and in accomplishing dilatation of the cervix. Many of these cases have, after several hours of ineffective pains, been finally terminated by manual assistance in securing dilatation of the cervix, with the usual lacerations which were repaired immediately postpartum. We have had no serious untoward results, such as prolapsed cord, sepsis, etc., from such interference, but we no longer recommend induction of labor unless the requirements outlined above can be met.

In spite of Doctor Thompson's conclusions, and while cognizant of the fact that there are real hazards and that often undue publicity may arise in a given case, we still feel that this procedure is safe and effective, provided one meets the requirements stipulated.

ESTROGENIC HORMONES: THEIR CLINICAL USAGE*

By C. F. FLUHMANN, M.D.
San Francisco

DISCUSSION *by E. Kost Shelton, M. D., Los Angeles.*

THE employment of extracts made from ovarian tissue was first introduced over forty years ago. These preparations were mostly dessicated gland products administered orally, and were long the subject of much discussion. They were advocated for all types of so-called ovarian deficiencies, and never lacked enthusiastic advocates and skeptical opponents.

The advances of recent years in our knowledge of the endocrine control of reproduction have shown that such "ovarian extracts" are biologically inert, and the favorable results obtained from their usage probably should be attributed to a psychotherapeutic effect. In their place, our attention has been directed to a very interesting group of chemical substances known as "estrogenic hormones" or "estrogen."

The estrogenic hormones are capable of inducing certain changes, normally controlled by the ovaries, in the accessory genital organs of women and ex-

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perimental animals. This is manifested in their ability to counteract the atrophy that follows castration, and to induce the proliferative phases of the estrous or menstrual cycles. The most pronounced of these changes are noted in the uterus, vagina, and breasts.

The property of the estrogens to repair the postcastration atrophy of the vagina of rodents is the basis of biologic tests employed for their demonstration. The animals used are mature female rats or mice which have been castrated for one week or longer. As a result of the excision of the gonads the epithelium of the vagina undergoes a pronounced atrophy, and is represented by two layers of small cuboidal cells. The injection of sufficient estrogenic material in these animals results in an intense proliferation of the mucosa, so that in sixty hours it has assumed the appearance of a fully-developed squamous epithelium, with large non-nucleated cornified cells at the surface. The presence of these cells in scrapings or smears of the vaginal wall constitutes a positive result in the Allen-Doisy test, the procedure generally employed in clinical studies and the standardization of extracts. In the Fluhmann mucification test the same changes are employed as criteria, but they are observed in microscopic preparations of the vaginal wall instead of smears.

DISTRIBUTION

The application of such tests has shown that estrogen is not a single specific hormone of the ovary, but is widely distributed in plant and animal life. It has, for instance, been demonstrated in the blood, urine, liquor folliculi, corpora lutea, and placentae of many species; in yeast, buds of salix caprea, sugar beet, parsley, cherry, plum, wheat, rice, fish roe, hen's eggs, petroleum, lignite.

The occurrence of estrogenic hormones in women is of much interest. Blood tests in female children show that estrogens are absent up to the age of about eight years. After this time they may be demonstrated, and their appearance is coincident with the gradual development of the secondary sexual characters. During adult life there is a cyclic rise and fall of estrogen in the blood and urine which follows the events of the menstrual cycle. In typical cases the hormone increases during the early part of the cycle, and reaches a peak in the midinterval, at about the time of ovulation. Then there is usually a progressive drop in its production until the time of the menses, although occasionally a secondary rise may be present with the onset of the flow. During pregnancy, estrogenic hormones are present in tremendous quantities.

The nonspecificity of the estrogens is shown by the fact that they are present in appreciable quantities in the blood and urine of men, and of women following castration and after the menopause. This is of especial interest, and demonstrates that they have also an extragonadal source of production.

The application of estrogenic hormone tests to clinical problems has been the subject of many investigations during recent years. It is a fertile field and many interesting discoveries have been reported, but it is beyond the scope of this paper to make further reference to this aspect of the question. However, I do feel that this work is still an academic research problem, and that there is no justification for the widespread adoption of estrogenic hormone tests as a routine clinical procedure.

CHEMISTRY

The widespread dissemination of estrogens is explained by the fact that many substances have estrogenic properties; that is, they are able to induce estrous changes in the vaginae of spayed rodents. They have been found to belong to an interesting group of bodies, the phenanthrene series, which also includes cholesterol, the bile acids, ergosterol, calciferol, and the male sex hormones.

Three estrogens have been isolated and purified from the urine of pregnant women, and are of especial importance in clinical studies. The first is estrone, also known as theelin, or ketohydroxyestrin. The second is estriol, or theelol, or trihydroxyestrin. The third has been recovered in pure form from follicular fluid, and it is thought that it may be a specific product of the ovary. It is estradiol, or dihydroestrin.

STANDARDIZATION OF EXTRACTS

The clinical use of estrogens has been much hampered by the confusion arising from the "units" employed. There are few, indeed, who are not bewildered by the vast array of rat units, mouse units, biologic units, international units, and so forth.

The standardization of estrogenic hormones is conducted with the Allen-Doisy test, and either rats or mice are employed. In 1932, an international standard was adopted in London under the auspices of the Health Organization of the League of Nations. This standard consisted of 20.9 grams of pure estrone contributed by several countries, and the international unit is the quantum of activity of one-tenth gamma of this preparation. In other words, one milligram of pure extrone contains 10,000 international units.

The adoption of the international unit is a great advance, but the products of different manufacturers must be compared with each other with great hesitation. The transposition of rat or mouse units into international units is still dependent on a preliminary standardization by means of the Allen-Doisy test, and the evaluation of such units in different laboratories varies greatly.

Several commercial houses have abandoned the use of units and substituted the actual weight of the hormone in milligrams. It is possible, and certainly very desirable, that eventually such a procedure will be generally adopted, and greatly simplify the problem.

COMMERCIAL PREPARATIONS

There are now many potent commercial estrogenic hormones available in this country. They are preparations of estrone, estriol, estradiol, or derivatives of these substances. Their common sources are urine of pregnant women or pregnant mares, human placentae, and in some cases they are partly synthesized.

The estrogenic hormones are usually administered hypodermically, orally, or by local application.

1. *By injection.*—The estrogenic hormone most often used in this manner is estrone, although Progynon-B (Schering Corporation) is a benzoic acid ester of estradiol. It is supplied in ampoules, and almost always dissolved in oil in order to avoid a too rapid elimination of the hormone after injection. The dosages employed vary from 0.02 milligram (200 international units), to 5.0 milligrams. (50,000 I. U.). Among the preparations available are:*

Amniotin (E. R. Squibb & Sons).
Estrogenic Substances (Reed and Carnrick).
Estrone (Abbott).
Estrone (Eli Lilly & Company).
Progynon-B (Schering Corporation).
Theelin (Parke, Davis & Company).

2. *Oral Administration.*—The extracts used for oral administration are practically all made of estriol.† They are available in capsules, tablets, or in liquid form. Since oral administration requires much larger dosages than the hypodermic route, the preparations are correspondingly more potent, but there is less unity in standardization methods employed in this group and direct comparison is impossible.

Amniotin (E. R. Squibb & Sons).
Emmenin (Ayerst, McKenna & Harrison).
Estriol (Abbott).
Estriol (Eli Lilly & Company).
Progynon-DH (Schering Corporation).
Theelol (Parke, Davis & Company).

3. *Local Application.*—The treatment of certain vaginal lesions is preferably conducted by topical applications, and a number of suppositories containing approximately 1,000 or 2,000 I. U. each are available for this purpose.

Amniotin (E. R. Squibb & Sons).
Progynon-DH (Schering Corporation).
Theelin (Parke, Davis & Company).

In addition, there is an aqueous preparation of Theelin and one of Progynon-DH in an ointment base for topical application.

ADVERSE EFFECTS

The large dosages of estrogen which have been recommended by various authors, especially in Germany, have given rise to some fears of possible secondary adverse effects. However, the studies of Mazer and his collaborators indicated that injections of large dosages over periods of two to three months produced no appreciable changes in body weight, basal metabolism, blood pressure, blood count, coagulation and bleeding times, blood chemistry and urine.

If estrogenic hormones are used in the first half of the menstrual cycle they may cause a delay in the appearance of the subsequent menstruation, and in amenorrheic or postmenopausal women they may lead to a period of abnormal uterine bleeding.

Experimental studies have shown that under certain conditions some estrogenic substances have carcinogenic properties. For this reason, fear has been expressed that the use of estrogen in the human may have an important influence on the development of malignant tumors. However, conditions in the human are very different from those in experimental animals, and there is little reason for believing that any serious danger really exists in the employment of estrogen in therapeutic dosages.

INDICATIONS

At the present time a correct evaluation of the indications for the clinical use of estrogenic hormones is very difficult. They have been recommended for a great variety of conditions, and it is very apparent that some of these are based more on the imaginative speculations of deluded clinicians and the over-enthusiasm of high-power salesmen than on sound scientific observation. However, attention must be directed to the treatment of lesions where results can be carefully adjudged from demonstrable anatomic changes. In this group belongs the treatment of gonorrheal vulvovaginitis in children, senile vaginitis, atrophic rhinitis, and, in a somewhat similar manner, climacteric symptoms.

The treatment of *gonorrheal vulvovaginitis in children* is now successfully carried out by the use of suppositories containing approximately 1,000 I. U. of estrogenic hormone. They are introduced daily at home, and the progress of the patient is determined by weekly vaginal smears. It may be necessary to prolong the course of therapy over many weeks, but usually negative smears are obtained in about three weeks.

The *atrophic changes of the vulva and vagina which follow castration or the menopause* may produce very distressing symptoms. There may be a vaginal discharge, slight bleeding, pruritus vulvae, dysuria, and dyspareunia. The application of estrogen suppositories is very effective. Rapid relief is obtained by the daily usage of suppositories of 2,000 I. U., and improvement is often seen within the first week, although it may prove necessary subsequently to repeat the treatment.

In recent months interest has centered on the treatment of *atrophic rhinitis and ozena* with estrogenic substance. This procedure was developed by a group of investigators at McGill University, and is based on the observation that the nasal mucosa responds to estrogenic stimulation. A solution of estrogenic hormone in oil is sprayed into the nostrils twice daily, each application consisting of 200 to 300 I. U. It is reported that within a few weeks distinct improvement is noted, with a lessening of abnormal secretion and an actual favorable change in the appearance of the conchal mucosa.

The vasomotor and nervous symptoms of the climacteric, or following castration, are successfully treated in a large percentage of cases by the use of estrogenic hormones, given either orally or by hypodermic injection. They have been recommended in small dosages such as 50 to 200 I. U. by mouth two or three times a day, and increasing gradually until relief is obtained. In the hands of many observers this has proved a satisfactory plan, but it is hard to determine whether the success of

*The many trade names employed has led to much confusion, and it seems desirable to list some of the better known types available in the United States. The list, however, does not purport to be complete, nor has it been chosen discriminatingly.

†Emmenin is a product containing estriol monoglucuronide as one of its active principles, and Progynon-DH is a preparation of estradiol.

this therapy is from an actual endocrine effect or whether it is purely suggestive treatment. It is well known that favorable results can be obtained also by employing biologically inert ovarian substance or mild sedatives. On the other hand, the employment of large dosages of estrogen, such as 5,000 to 20,000 I. U. by intramuscular injection every three to four days for periods of several weeks, has resulted in improvement in severe resistant cases, and two signs indicate that an actual endocrine effect is produced. In the first place, there is a proliferation of the vaginal mucosa which can be demonstrated by the use of smears or biopsy specimens. Secondly, the function of the anterior hypophysis is modified. It is known that after castration, or during the climacteric, unduly large amounts of anterior pituitary gonadotropic hormone appear in the blood and urine. In 1930 I suggested that this phenomenon may be associated with so-called climacteric symptoms. This phase of the problem is being discussed in detail by Doctor Murphy and me in a sectional paper at this meeting. It has been shown that the gonadotropic hormone can be made to disappear by the injection of large dosages of estrogen and that this disappearance is associated with clinical improvement. The effect, however, is usually only temporary, and within a few weeks or months the hormone is again present in the blood and urine and the symptoms recur.

With the other indications which have been advanced for the clinical usage of estrogenic hormones, one enters on less certain ground. The exact reasons for their employment are not very clear, there are many spontaneous recoveries which can be wrongly accredited to the therapy, and above all, a favorable influence often can be attributed to a psychotherapeutic effect. In this category, therefore, treatment with estrogen should be regarded as still in the experimental stage.* However, three conditions deserve special consideration, namely, amenorrhea, dysmenorrhea, and periodic mastalgia.

The employment of estrogenic hormone for most cases of functional amenorrhea is not based on sound physiologic principles. The amenorrhea usually results from deficient ovarian function, and this hormone cannot stimulate the gonads. It is merely substitutive therapy, and although uterine bleeding may be produced easily it is not true menstruation, but an abnormal flow which does not necessarily recur in the months following cessation of the treatment. On the other hand, proponents of this type of therapy believe it is indicated in the presence of uterine hypoplasia. They maintain that large dosages of estrogen over long periods of time (such as 10,000 I. U. twice weekly for two to three months), produce a growth of the uterus and eventually a restoration of normal cycles.

The results obtained in the treatment of primary dysmenorrhea direct especial attention to the usage of estrogen in some cases, although the difficulty of evaluating such results makes one hesitate to accept them without reservation. The reason for employing these substances is based on the observation that periodic bleeding in hyperplasia endometrii is usually painless, and this condition is due to excessive stimulation with estrogenic hormone. It also is believed by several authors that estrogen may help to overcome the uterine hypoplasia which often accompanies dysmenorrhea. In this condition, estrogen is employed in daily oral dosages of 100 to 500 I. U. over periods of three months or more, or in larger dosages given intramuscularly during the two weeks preceding the onset of menstruation. Another method of administration is the intranasal route. This procedure is begun with the onset of the pain, and 200 I. U. of an aqueous solution is used every hour for six doses. A few drops at a time are instilled into each nostril with an eyedropper.

The condition of periodic mastalgia, or painful breasts, during the premenstruum has received considerable attention in recent years, and estrogenic hormones have been highly recommended as an effective method of therapy. It is necessary to postpone final judgment, however, since good results have been reported from biologically inert ovarian substance as well as ridiculously small amounts of potent estrogenic hormone. It is difficult to conceive that such a procedure can have a true endocrine effect. A number of investigators advocate the employment of as much as 100,000 I. U. of estrogen weekly for a period of three months in an attempt to produce an artificial inhibition of the anterior lobe hyperfunction which they believe is the causal factor.

In conclusion, attention must be directed to a definite contraindication to the use of estrogenic hormones, namely, abnormal uterine hemorrhage. Since estrogen stimulates a growth of the endometrium, its administration may result, not in cessation, but actually in an increase, of the bleeding.

The fantastic claims made for the estrogenic hormones have inevitably caused them to be regarded by many physicians with a good deal of suspicion. It is unfortunate that such is the case, but it is hoped that a sane consideration of their function in normal physiology may lead to a correct evaluation of their place as therapeutic agents.

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* The use of estrogenic hormone has been recommended for oligomenorrhea, migraine headaches, vomiting of pregnancy, toxemias of late pregnancy, induction of labor, acne, hirsutism, frigidity, climacteric hypertension, arthropathia ovaripriva.

DISCUSSION

E. Kost Shelton, M. D. (921 Westwood Boulevard, Los Angeles).—Doctor Fluhmann's comprehensive treatment of the subject leaves very little to be said by way of discussion. Coming as it does from the pen of a pioneer in gynecologic endocrinology, it is refreshing to note how clearly he has presented the use and avoided preaching on the abuse of the estrogenic substances.

As he has pointed out, the estrogenic preparations are substitutive in the same sense that insulin and thyroxin are substitutive and should be handled accordingly. It has always been difficult for me to see the rationale of treating a patient with an undeveloped uterus, ovaries, or adnexa by such means when there is a remaining hope that the patient's own ovaries may be made to function and manufacture her own estrogens. This, of course, would have to be accomplished by use of the pituitary or pregnancy prolan or other endocrine means. There is also some possibility that a dormant but potentially functioning ovary may be retarded instead of enhanced as regards development and function.

Only with the advent of the more concentrated preparations have we been able to objectively study their effect upon the body economy. The measurable presence of pitui-

tary prolan in blood and urine, signifying complete or almost complete cessation of ovarian function, as Doctor Fluhmann pointed out nearly a decade ago, and now his finding that this pituitary fraction may be made to disappear by an adequate dosage of estrin, are extremely important from many standpoints. Some of the most alarming vasomotor disturbances involving cardiac rate and rhythm marked vacillating changes in blood pressure and bizarre edemas may be handled more effectively in the light of these findings. Proper dosage in such patients is all-important, as many have received inadequate treatment, without relief, over a long period of time.

MUSCLE GRAFTS: IN THE SURGERY OF THE HEART AND LUNGS*

By H. Brodie Stephens, M.D.
AND
Harry Benteen, M.D.
San Francisco

Discussion *by Albert H. Elliott, Jr., M. D., Santa Barbara; Paul C. Samson, M. D., Oakland.*

PEDICLED muscle grafts have been employed in surgery for a variety of purposes. Credit is given for such a graft by Wangensteen[1] for the closure of a persistent duodenal fistula, as well as for filling up a cavity in the femur, following curetment of a bone cyst. Dixon,[2] McNealy and Shapiro[3] recommend the employment of viable muscle grafts for the plugging of or reinforcing the suture lines in wounds of large blood vessels. Reid[4] believes that pedicled muscle flaps may be of value in the obliteration of aneurysmal sacs of blood vessels.

Abrasanhoff[5] is accredited as the first to suggest and employ successfully a pedicled muscle graft in the closure of a bronchial fistula.

We have employed viable muscle grafts for the closure of bronchial fistulas, chronic empyema cavities and, in one instance, such a graft was successfully utilized in filling up a cavity resulting from an infection in a thoracoplasty wound.

PEDICLED MUSCLE GRAFTS AS TRANSPLANTS

It would appear correct, therefore, to assume that pedicled muscle grafts are worthy transplants. They seem certainly to have a peculiar faculty to resist digestion, either from the ferments of secretion or suppuration.

The fairly recent suggestion by Beck[6] and the actual employment by him of a pedicled muscle flap to provide a new blood supply to the heart (the latter being impoverished because of coronary thrombosis or sclerosis, in many human cases), brings us to the question of the fate of such muscle transplants. Churchill[7] but recently, in a discussion on the use of transplants to close bronchial fistulas, stated it was his opinion that a muscle graft functioned merely temporarily as a plug, that the graft does not permanently fill the cavity in the sense that a dentist fills a tooth, but the graft is slowly absorbed and replaced by fibrous tissue.

The literature is sufficiently stocked with discussions upon the technical methods in the handling of pedicled muscle grafts and their clinical application, but there is a decided paucity in the histologic study of the end result. It became our advantage to study at necropsy a pedicled muscle graft which had been utilized to close the remains of a lung abscess cavity, as well as several bronchial openings, some two years before. In this instance the graft could still be grossly distinguished from the surrounding lung parenchyma; it had remained viable and had filled up what had been a considerable hole in the left lower lobe. Fibrous tissue had replaced the striated muscle for the most part, but histologically many striations were still visible. Furthermore, there were many large blood vessels, both in the substance of the graft itself and running along the surface of the graft, connecting the visceral surface of the lung to the chest wall. It was the pathologist's opinion that these large vascular connections accounted for the machine-like murmur which was audible over the region of the graft before death.

BLOOD SUPPLY OF GRAFTS

Pedicled muscle grafts would seem, therefore, to retain their bulk and viability indefinitely and, in addition, will survive in a comparatively unfavorable environment. The experimental studies of Pool and Garlock[8] further substantiate this conclusion. The final problem under discussion is that which concerns the effectiveness of such a graft as a conveyor of new blood supply. O'Shaughnessy[9] is of the opinion the great omentum would serve as the best means to provide blood to an ischemic heart, and cites convincingly the manner in which the omentum has been seen to nourish a large fibroid of the uterus, or again the Talma operation, where the omentum is utilized to shunt the portal blood through other channels. Mautz and Beck[10] recently concluded that adipose tissue has been most promising for developing new arterial connections with the coronary arteries, in their hands. These authors utilized pericardial and mediastinal fat and omentum, and are of the opinion that these fatty tissues develop connections with more regularity than when skeletal muscle is used. They further state that frequently pedicled muscle grafts are disappointing, because the pedicles become converted into scar tissue and an abundance of collateral channels fail to develop. However, in several instances, they report that excellent collateral connections were observed between the coronary arteries and the arteries of the chest wall, via the substernal muscles.

At the present time, sufficient information is not available to state whether the anastomoses through grafts can exceed the size of the normal collaterals of the heart. However, observations indicate that in the late stages of coronary arterial obstruction blood actually flows into the heart through the extracardiac connections, since it is only in severe coronary arterial obstructions that these vessels have been seen to persist and enlarge.

OMENTUM

It appears likely, from the foregoing brief discussion, that the omentum is probably superior to the pedicled muscle graft as a conveyor of new blood supply. Certainly there is not the danger of atrophy in the omental transplant which will occur

* From the Division of Thoracic Surgery, Department of Surgery, University of California, San Francisco.
Read before the General Surgery Section of the California Medical Association at the sixty-seventh annual session, Pasadena, May 9–12, 1938.

TABLE 1.—*Muscle Plasties*

Type of Lesion	Total	Result			Mortality
		Healed Per Primam	Second Intention Closure	Failure	
Lung abscess with bronchial fistula	7	5	2	0	0
Infected echinococcic cyst	1	1	0	0	0
Chronic empyema with bronchial fistula	4	2	1	1	1
Chronic empyema without bronchial fistula	4	2	2	0	0
Tuberculous empyema	2	0	0	2	0
Postoperative infection in thoracoplasty wound	1	0	1	0	0
Total	19	10	6	3	1

in muscle when there is interference with the nerve supply, or even the venous circulation. Brooks,[11] in his study of Volkmann's ischemic paralysis, has demonstrated beautifully the ease with which muscle tissue can be transformed to a mass of fibrous tissue when there is marked obstruction to venous return. In the human patient, whether the added complication of opening the diaphragm will outweigh the apparent advantages of the omental graft for new blood supply, will have to be determined by the clinical experience of the future.

ISCHEMIC HEARTS

It is our regret that we have nothing more to add to the present reported experimental results regarding the use of muscle grafts to provide an increase of circulation to an ischemic heart. We feel our experience with fourteen dogs, treated in a similar manner to those of Beck and his associates, simply confirms the findings of these investigators. Their experiments have been so thoroughly and clearly presented that a repetition of the results of our small group would be superfluous. The gains from our work we feel in a sense to be purely personal. Repeated experience in surgery upon the heart of the experimental animal seems to acquaint one with the problems that will occur in the human patient, and one enters the operating room with that comfortable feeling that he has been there before.

BRONCHIAL FISTULAS

We have been satisfied with the results obtained in the use of muscle flaps to close bronchial fistulas, which latter have persisted following the drainage of a lung abscess. It is our custom to delay the plastic closure until the patient is free from cough, and the healing lung is pink and healthy. The bronchial openings are anesthetized with 10 per cent cocaine solution and the muscle flaps are then sewn snugly into the depression of the lung containing the fistulas. We take care to leave an adequate base to the muscle flap so that the muscles receive a satisfactory blood supply. Usually the nerves supplying the flap are not seen, and we make no serious effort to locate them. Since the base of the flap is customarily that portion attached to the chest wall, it is probable the nerve supply is usually intact.

OTHER DISEASES

Our results in chronic empyema of the nontuberculous type are also encouraging, and it is our intention to use muscle flaps more frequently in the treatment of this condition in the future. The two failures which occurred (Table 1) in the cases of tuberculous empyema suggest that perhaps this is one environment which is unfavorable to the muscle graft.

We have employed the muscle graft to provide a new blood supply to the heart in only one patient. This patient was 62 years of age, and had been suffering from almost constant anginal pain, the pain being present even while the patient was at rest. The operative procedure was carried out with very little shock to the patient but, unfortunately, he developed bronchopneumonia soon after surgery and expired on the third postoperative day. The omentum has been employed by us in another human case, a man of 42 years of age, who was suffering from intractable angina, with electrocardiographic evidence of coronary sclerosis. It has been but four weeks since his operation, and of course it is too early to tell the result of the procedure. It may be said, however, that the postoperative convalescence has been serene and not eventful up to date.*

* This patient died suddenly while walking on the street, approximately five months after operation. There had been little change in his condition since operation. It would seem correct to assume that omentopexy in this particular patient produced neither subjective nor objective improvement.

TABLE 2.—*Statistics of Beck and O'Shaughnessy*

Total Cases Operated	Mortality	Absolutely and Completely Relieved of Pain	Pain Relieved Less Drugs Some Working	Slight Relief	No Improvement	Too Early to Definitely Classify But All Are Improved
Beck—1937 25	8—32%	3	9	1	1	3
O'Shaughnessy—1938 15	5—33+%	6	3		1	

Table 2 shows the latest published results of Beck[10] and O'Shaughnessy.[12] Both authors are encouraged by their results, chiefly, I believe, because of the striking improvement in several of their patients.

SUMMARY

In summary, it is our belief that the following conclusions can be accepted concerning the subject under discussion.

1. Pedicled muscle grafts are worthy transplants; they retain their bulk over long periods of time, and they resist the ferments of secretion and suppuration. They are particularly useful in the closure of persistent bronchial fistulas.

2. The omentum is probably superior to the pedicled muscle graft as a conveyor of new blood supply.

3. Sufficient operations, employing either the pedicled muscle graft or the omentum, have been carried out upon the human to provide increased circulation to an ischemic heart, with encouraging results to warrant further trial with these procedures.

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DISCUSSION

ALBERT H. ELLIOTT, JR., M. D. (1421 State Street, Santa Barbara).—The field for the application of elective surgical procedures in the attempt to influence chronic progressive disease processes is, of late years, appreciably widening. Conditions heretofore regarded as residing strictly in the realm of medical therapy—hypertension, heart disease, for example—are in an experimental and tentative way being subjected to surgical intervention, which usually has, as its goal, one of two purposes, namely, to alter presumably abnormal physiological process by surgical attack upon anatomically normal structures, or to produce an abnormal physiologic state which might serve to ameliorate that resulting from the disease process itself. Splanchnic section for the treatment of hypertension is an example of the former; total thyroidectomy for heart disease, of the latter. The internist is watching these attempts with great interest, but not without some misgivings as to the soundness of the underlying premises upon which these procedures are based. There can be no doubt that many times the patient is symptomatically improved to the extent that he may even resume a fairly normal degree of activity—a result impossible of achievements by medical means alone. But the evidence would seem to indicate that in most instances the disease process itself is not stopped, or even slowed. This is particularly true of total thyroidectomy for the treatment of heart disease, and one cannot help but be chary of superimposing a disease state—myxedema—upon that already present. In my opinion these criticisms do not apply to the operation devised by Beck and his collaborators for the treatment of coronary insufficiency. That operation has a healthy experimental background which, as you have heard today, can be verified by other workers. The mechanism of coronary strangulation expressing itself in man as angina pectoris and coronary occlusion can be experimentally closely mimicked in the dog. It has been shown unequivocally that if the myocardium is partially starved for blood, vascular connections between the heart and extracardiac tissues can be established in as short a period of time as three weeks, if the subepicardial surface of the heart and the tissue bridge are in close contact. The amount of blood flowing into the myocardium through such a graft must be considerable, as the coronary blood supply may be almost, but not entirely, throttled, and the animal not only survive, but be active. Probably also the graft serves to distribute blood from healthy to ischemic myocardium. The sequence of events here—impaired coronary supply, vascular invasion of the myocardium through the graft, then coronary closure—is worthy of emphasis as it suggests that not only may a chronically insufficient coronary circulation be augmented, but also that acute coronary occlusion, ordinarily fatal, may be borne (by virtue of this), with impunity. In essence, then, this procedure constitutes not only a remedial attack upon the existing circulatory insufficiency, but perhaps insures against the catastrophe of acute coronary blockage. It would seem that the patient most likely to benefit from this operation would be the sufferer from angina pectoris — coronary narrowing — whose myocardium is yet intact, but who is certain, as I believe all such patients are, barring accidents, to develop coronary thrombosis at a future date. This type of patient is an extremely common therapeutic problem to the internist, who feels a sense of defeat as he gauges the prognosis. To judge from the protocols of Beck and O'Shaughnessey, most of their patients had suffered one or more occlusions before the operation was attempted. It is obvious that bathing a fibrous myocardium in blood would accomplish but little, hence it is surprising that their results are as good as they appear to be. I feel sure they would be better in a series of patients in whom the disease process had reached a stage analogous to that existing in the experimental animals at the time of operation. It will be extremely interesting to watch this group of operated patients. Will their lives be prolonged, and will they survive coronary occlusion in the future? Will their coronary disease progress without clinical evidence—occlusion without infarction? Will the anastomotic blood channels remain viable and patent? In this regard, the observations, by Doctors Stephens and Benteen, of patent blood channels in a graft two years old is both heartening and important.

It has been a privilege to listen to a paper dealing with a new surgical principle, the application of which is sure to find a place in the treatment of such a common and devastating malady as coronary disease.

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PAUL C. SAMSON, M. D. (411 Thirtieth Street, Oakland).—Doctors Stephens and Benteen have outlined the subject under discussion in a very thorough manner. The thoracic surgeon, perhaps oftener than any other, is confronted with the problem of repairing large defects in body contour. Various types of plastic operations, combined with the use of muscle grafts, have been employed successfully for many years. The only recent addition to this field is the suggestion of Neuhof (J. Thor. Surg., 7:23, 1937), that free fat transplants be used. So far as I know, this work has not been confirmed. The exposition of technique is not within the scope of this discussion, except to say that, depending upon the location of the defect, great ingenuity often must be exercised by the surgeon in the

selection and treatment of his muscle graft. The constant presence of low-grade infection and of a rigid bony cage, add to the difficulties. Because of the infection, free muscle plugs cannot be used. It is absolutely essential that a pedicled muscle graft, with an adequate blood supply, be obtained, if a "take" is to be expected. The authors have indicated the various possibilities in using muscle grafts in infected fields. It is not unexpected that the presence of a mixed tuberculous and pyogenic infection prevented a good result in the author's cases. The recent report by Coryllos (Quart. Bull. Sea View Hosp., Jan., 1938), however, that he has closed tuberculous cavities in the lung by a muscle plasty, should be studied further.

In considering the surgical creation of a collateral blood supply in cardiac ischemia, there will be further controversy, undoubtedly, as to whether the omental or the skeletal muscle transplant is superior. The experimental work both of Beck and O'Shaughnessy seems to be extremely sound. In a series of autopsies I found that in several cases the omentum was too short to be pulled up through the diaphragm without greatly angulating the large bowel. For this reason I have hesitated to use the omental transplant on a patient. The Beck operation still carries considerable risk, and experiments now are being performed to see if it may be possible to divide the operation into stages. I have done pectoral muscle transplants to the myocardium (Beck operation), on two patients. The first patient was a man of sixty-two, referred by Dr. Mark Emerson of Oakland. In the past, several abdominal operations had been performed because of persistent epigastric pain. He also complained of severe intermittent chest pain with radiation down the left arm. Investigation revealed definite evidence of coronary sclerosis and probable old myocardial infarction. Operation was performed on December 13, 1937. The coronary arteries were thickened and palpable, and a large myocardial scar was present in the anterior wall of the heart near the apex. The postoperative course was stormy. At present the patient can be classified as improved, as far as his chest is concerned. He has no residual chest pain but the abdominal difficulties have continued, and their etiology is unknown.

The second patient was a woman of sixty-two years of age, referred by Dr. Hobart Rogers of Oakland. She had had two definite coronary attacks, one seven years, and one seven months prior to operation. She had been confined to bed almost continuously since the last attack. There was no evidence of congestive heart failure, but the patient was obviously a poor surgical risk. Operation was performed on March 14, 1938, and death occurred on the second postoperative day. An important finding at autopsy was the relatively firm adherence of the graft to the surface of the myocardium.

GERIATRICS*

A CONTRIBUTION OF TWENTY-FIVE CAREFULLY STUDIED PATIENTS WHO ARE ACTIVE AND IN GOOD HEALTH BEYOND EIGHTY YEARS OF AGE

By LEONARD J. BRUNIE, M.D.
Pasadena

DISCUSSION *by Robert E. Ramsay, M.D., Pasadena; Franklin R. Nuzum, M.D., Santa Barbara.*

GERIATRICS is the study or practice of the science of caring for the aged. A review of the literature teaches that this is not only an old science, but that the many scientific contributions in recent years have made it an interesting and rapidly broadening field in the practice of medicine.

MATERIAL FOR THIS STUDY

The present study has been carried on for the past two years, and is a preliminary report, presented with the hope that it will stimulate interest in the field of geriatrics, and possibly encourage some helpful suggestions as further case studies are made and added to the series. This series presents twenty-five cases—thirteen men and twelve women—active and in good health in the ninth decade of life. The studies include, in each case, careful medical, dietary and social history, physical examination, blood count, urinalysis, electrocardiogram and fluoroscopic examination of the chest. I am perfectly aware that in such a small number of cases statistical data are inaccurate, and I am also aware that, in the many facts sought after in these detailed histories, we have no controls by which to judge our deductions. However, we hope to increase the number in this series from time to time and, by a careful recording in the literature, our general deductions can be reaffirmed and revalued. This has been admirably brought out in our recent studies of the literature in this field, for on many important points all of the authors are agreed.

HISTORICAL

Longevity has always been a subject of interest to mankind. Herodius,[1] in his history written in the fifth century before Christ, refers to the presence of longevity among a milk-eating people. Cicero[2] wrote on the subject of old age, as well as did Sir Francis Bacon.[3]

In more recent times, Metchnikoff,[4] who has contributed extensively to scientific knowledge, brought out in the field of geriatrics, a book entitled "The Prolongation of Life." Unfortunately, he made an unconfirmed conclusion, namely, that longevity was dependent upon the type of intestinal flora present. Doctor Lorand,[5] of Carlsbad, in 1909 claimed to be the earliest writer on the prophylaxis and treatment of old age as a preventable chronic disease. He believed that old age was due to degeneration of the ductless glands, and that these could be favorably influenced by therapy.

Gallichan,[6] an English writer, in 1929 contributed to the field and emphasized that "overwork, worry, pecuniary anxiety and boredom are all important contributing factors of untimely aging and senescent invalidism."

Worcester,[7] in his unusually able lectures, has described the "Care of the Aged." He emphasized the psychological handling of these patients, and set forth the four cardinal hygienic requirements of senescence as "More warmth, more rest, less work and less food." He stated that diagnostic studies should be brief and simple, and at times entirely disregarded, and that these patients often need the friendly support more than the medical aid of their physicians.

Pepper,[8] in 1936, carefully outlined in his "Notes in the Field of Geriatrics" the differences between senescence, or the normal physiological aging, and senility, or the abnormal pathological aging, and suggested that disease in old age differs in many ways from disease in other periods of life; these differences being the basis upon which the science of geriatrics is developed.

Horn,[9] in 1937, in "Geriatrics as a Modern Specialty," pointed out that between the years of 1900 and 1930 there was an increase of 52 per cent in

* Read before the General Medicine Section of the California Medical Association at the sixty-seventh annual session, Pasadena, May 9–12, 1938.

those individuals in the United States 60 years of age and over, as compared with a general increase in total population of only 38 per cent. He emphasized the importance of conservatism in treating the aged, and said that, as we grow older, there is a decrease in water and an increase in the calcium content of the soft tissues, with a resulting loss in resiliency.

An editorial in the *Journal of the American Medical Association*[10] states that longevity is an art as well as a science. "The art consists of practicing a reasonable adaptation to environment and adherence to the laws of hygiene, based upon a knowledge of oneself and one's needs. The mental outlook is as important as the physical aspect of living." It is desirable to "cultivate equanimity, contentment and optimism."

A most extensive statistical study in the field of geriatrics was made in Japan. This work was reported by Doctor Nakayama[11] after he had spent ten years in studying 10,000 people past 80 years of age. He reports that living in cities decreases the life span, and that aged women are more numerous than aged men. The majority of these people had long-lived relatives; they all had from three to five brothers or sisters. Most of them were in the middle class; the lower class ranked second, and the upper class ranked third. The majority proved to be the eldest son or daughter of fathers between the ages of 26 to 30 years, and mothers between the ages of 21 to 25 years. An unmarried person seldom enjoyed longevity. The aged were mostly of normal constitution, but some were corpulent, and a few were slender. They were not particular about what they ate. In summary, he concluded "that, in order to live long, one should live in the country, and the standards of living should be those of the middle class."

MEDICAL STATISTICS

According to life insurance statistics,[12,13] the average length of life today is 59.3 years for men and 62.8 years for women. In our series of cases comprising thirteen men and twelve women, the average age is 84.5 years—the men averaging 85.5 years and the women 83.5 years at the time of this writing.

AUTHOR'S OBSERVATIONS

In briefly reviewing our findings in the study of these cases, I would first like to point out that we have chosen those individuals who were found active and in good health in the ninth decade of life. I would also emphasize that the requirement to be active and in good health in the eighties has placed these cases in an entirely different group from those having passed away in their seventies. The number of cases could be greatly augmented if those in the eighth decade of life were included, but a large proportion of these patients died as a result of the degenerative diseases which were rare if seen at all in those who were active and in good health beyond 80 years of age. By "active and in good health" I mean that these individuals were driving their own automobiles, some were still working for a livelihood, and many were active in play—trap-shooting, going to the races and theater, and even dancing and golf. Most of them took genuine interest in a variety of hobbies. Mentally, they were all active and alert.

These patients were all of the white race; all of them were born in America, with the exception of three who were born in Germany. Socially, 30 per cent of these cases were in the upper class, 50 per cent in the middle class, and 20 per cent in the working class.

Heredity, without question, is the fundamental requirement for longevity. In our series there was only one individual who did not have immediate relatives—that is, parents or grandparents, brothers or sisters—living beyond 75 years.

The incidence of infection in their lives was relatively unimportant. Most of them had had the usual childhood diseases. One had a severe diphtheria at the age of 2 years. Three had pneumonia in adult life, and four had influenza at the time of the 1918 epidemic. Four gave histories of tonsillitis. An interesting finding was that 33 per cent of the group gave histories of migraine headaches occurring in earlier life, although none of them complained of more than occasional mild headaches at the present time. An interesting endocrine factor is that 60 per cent of the men had retained their sexual powers to an average age of 80 years. This would indicate that their general endocrine systems were still functioning. There was no case of syphilis and only one mild case of tuberculosis. It is interesting to note that one individual, a man, recovered from pneumonia at the age of 91 years.

SURGICAL OPERATIONS

This group had had comparatively little surgery. Surgical procedures are, however, well borne in the aged.[14] One patient had a cholecystectomy and an appendectomy at the age of 74 years. Another had a gangrenous appendix which necessitated the resection of several inches of intestine, from which she made a splendid recovery at the age of 75 years. A third patient sustained a severe injury with a pelvic bone fracture at 77 years of age. Tonsils had been removed in only two cases. Two had prostatic resections at the age of 84 years. Both are still active and in good health.

HABITS

Moderation and temperance were found to be the rule, in a study of the habits of this group, but in no sense were they reformists or faddists. They did not reveal any special dietary habits; all of them had eaten meat once a day throughout their lives. Forty per cent of the men used alcohol in moderation, and 60 per cent used tobacco. Coffee was used by 60 per cent of the group. As a rule these people were adverse to taking drugs, and only one used sleeping capsules. Only four reported difficulty in sleeping. They were versatile in their activities, but in their habits of living and personal hygiene they were moderate in all things. Thirty-six per cent had, at the time of this study, living mates, and of the remainder, 43 per cent had been married until 75 years of age or later. There was no unmarried individual, although several had no children. Walking was the chief form of exercise, several in our group averaging four miles a day.

PHYSICAL EXAMINATION

Careful physical examinations revealed that, as a group, these patients were remarkably well preserved. Hearing was good in 36 per cent. Sight was very good in 36 per cent, and all of them could see to read with the aid of glasses.

The average height for men was 67½ inches, and for women, 62½ inches. The average weight for men was 145 pounds, and for women, 118 pounds. None of the men had ever been overweight; four of the women had been approximately 20 per cent overweight for short periods in their younger lives.

The teeth were artificial in 60 per cent of the group, and one-half of those wearing artificial dentures had their teeth extracted after the age of 70 years.

The most interesting finding was the absence, in any appreciable degree, of arteriosclerosis. The circulatory systems were, as a group, good, the average blood pressure being 152 systolic over 85 diastolic. On fluoroscopic examination of the chest, 60 per cent showed the aortic shadow to be increased in density, but there was an apparent widening of the aorta in only 8 per cent of the cases. The fluoroscope did not show any appreciable cardiac enlargement; there was slight left ventricular hypertrophy in 30 per cent.

LABORATORY FINDINGS

The electrocardiograms were surprisingly normal, with little evidence of coronary disease. The heart rate averaged seventy-four beats per minute; the rhythm was regular except for auricular fibrillation in 8 per cent, and sinus arrhythmia in 20 per cent. The PR interval was prolonged in 8 per cent, the QSR interval in 12 per cent, with a maximum QRS of 0.16 seconds. It was interesting to note that in no case was there a negative T2. The S-T segment, however, showed some change from normal in 33 per cent. Sixty per cent of our cases showed some degree of left axis deviation. It is explained that this change to a left axis, which is frequent in the aged, is a result of a change in heart position from the vertical to the horizontal, as well as to muscle hypertrophy. The cause for hypertrophy is not arteriosclerosis,[15,16] but "changed metabolic processes in the old heart serve to stimulate growth. Cardiosclerosis is not marked in 'normal' old people."

The conduction system of the heart is supposed to be more or less separate in its metabolic process, in which glycogen plays the leading rôle. That this is usually in good condition is borne out by other observers[15,16] as well as by this study.

Blood count and urinalysis were routine. Twelve per cent of our patients showed a trace of albumin. Casts, mostly hyaline, were found in 32 per cent of the urinalyses. Average hemoglobin was 82 per cent, on a basis of 17 grams (Sahli method) reading 100 per cent. Anemia was not a frequent finding.

COMMENT

In conclusion, our studies so far show very little on the positive side in answer to the question of how to prolong human life.

Heredity, without question, is the most important single factor in longevity. Moderation rather than abstinence is the rule for these people. Metabolic requirements were fulfilled, but special diets, as such, played no part. Obesity shortens life, and none of these people were overweight.

Another important point is that the individuals in this group were fortunate in that they escaped severe infections in earlier life.

To me, however, the most interesting observation is that they did not develop true arteriosclerosis.

It has been pointed out[8,17] that persons in this age group develop some thickening of the medial coat of the vessel wall which does not cause the obstruction to the lumen and resulting degenerative change found in arteriosclerosis. This undoubtedly accounts for the good condition of the circulation.

While to some these may seem commonplace conclusions, it was not to attempt a solution of the problem of longevity that this paper was written, but rather to encourage further studies and exchange of information on this very important subject.

60 South Grand Avenue.

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DISCUSSION

ROBERT E. RAMSAY, M. D. (65 North Madison Avenue, Pasadena).—This interesting address on geriatrics finds a sympathetic ear among all who have specialized in pediatrics. It is natural that those who have limited their work to the human organism in infancy and childhood should understand the desire of others to study it in old age.

The motives which actuated the founders of pediatrics were doubtless mixed, pure love of children being prominent, the fundamental interest having always been that of

preventive medicine. Doctor Brunie has mentioned the decrease in infant mortality, in which pediatrics has played a part. Much more important in our minds has been the desire so to assist in the nurture and care of the child in health and disease as to increase the likelihood of an efficient and healthy adult life and a happy old age.

Geriatrics must follow the same procedure as was followed in pediatrics—first gathering a body of facts by the study of case histories, as Doctor Brunie's address has indicated. These facts will form the basis for better understanding of the physical and mental characteristics of the elderly and improved medical treatment. There is no question as to the need for understanding, gentleness and sympathy in the care of the aged. For the young we now have schools, clinics, and countless helpful agencies, while for the old we have places of refuge, pensions, retirement funds and the like which imply that the race is run and the end is near.

But the ability to work, to create, to enjoy is not merely a matter of years. Old age is not necessarily incapacity. Too often old age is preëminently a mental state induced by misfortune, hardship or temporary illness. Elderly people can be useful and happy in the use of whatever powers they have. No one can better appraise the social, mental, and physical aspects of the elderly than the physician. Increased interest in the study of geriatrics must inevitably result in better medical care of those of middle age and react beneficially on medical treatment as a whole.

Doctor Brunie's address presents the opportunity of geriatrics, a field which will richly reward study. It is more than an opportunity. It is a duty.

❀

Franklin R. Nuzum, M. D. (Cottage Hospital, Santa Barbara).—Doctor Brunie is deserving of much credit for his presentation; his data are carefully assembled and accurately analyzed, while his conclusions are conservatively drawn. My discussion will have to do with a different phase of geriatrics. I wondered how many of my patients were in the older age groups—that is, from 74 years on—when they first consulted me; how many regarded themselves as well; what pathological changes were in those who were not well.

Of 6,600 private office patients, I found that 300 were 74 years old or older. These were divided into three groups; those from 74 to 79 years, inclusive; those from 80 to 84, and those from 84 years and older.

In the group, 84 years old or older, there were 29; males 19, females 10. Of this number, 70 per cent are still living, and 15 per cent are regarded as well. The chief pathological findings in those not well were arteriosclerosis, without hypertension, 32 per cent; hypertension, including arteriosclerotic Bright's disease, 26 per cent; congestive failure, 30 per cent; malignancy, gall-stones, shingles, one patient each.

In the next group, from 80 to 84, there were 66 patients: 34 males, 32 females. Of this number, 60 per cent are still living; 6 per cent are considered well. The pertinent pathological findings in this group were, arteriosclerosis, 36.8 per cent; hypertension, including arteriosclerotic Bright's disease, 37.7 per cent; angina pectoris, 13.6 per cent; congestive failure, 7.5 per cent; malignancy, 6 per cent; senility, 4.5 per cent.

In the group from 74 to 79 there were 200 patients: males 106, females 94. Of this number, 75 per cent are still living, 2 per cent are regarded as well. Of the remainder, hypertension, including 4 instances of apoplexy and arteriosclerotic Bright's disease, was present in 4.5 per cent; arteriosclerosis, in 38 per cent; senile dementia, 2.5 per cent; angina pectoris, 17 per cent; auricular fibrillation, 6 per cent; coronary occlusion, 4.5 per cent; congestive failure, 5 per cent; malignancy, 5 per cent; and pneumonia, 1.5 per cent.

In this brief summary, it is evident that in this medical practice in Southern California the sexes are almost equally divided; about 5 per cent of the total number of office patients were 74 years or older; 75 per cent of these patients are still living, having been followed for a period of several years, some of them since 1926. As was to be expected, the most frequent physical finding was generalized arteriosclerosis (this conclusion reached from a palpation of the peripheral arteries and a study of the arteries of the retina), not associated with hypertension. Second came the hypertensive group, with its associated sclerosis of the peripheral vessels, its cerebral accidents, and in many of these patients clinical evidence of arteriosclerotic Bright's disease. Evident heart disease was present in 30 per cent of the oldest group, in 21 per cent of the group from 80 to 84, and in 32 per cent of that group from 74 to 79. Malignancy averaged approximately 5 per cent. There was a scattering of various other illnesses.

The medical care of these older persons should differ from that given younger individuals, in that it is better to treat the older individual specifically and his illness secondarily. It is certainly not wise to change the lifetime habits of these older people, and to institute a new and markedly changed regimen. To quote Dr. James B. Herrick:

> The doctor has a dual function; he must be scientifically minded toward the disease, yet sympathetically minded toward the patient, feeling (and in the derivational sense of the word), sympathetic and even suffering with him. How is he to acquire that proper balance of these two seemingly conflicting elements, to the end that too much sympathy may not warp his judgment or that too scientific, even mechanistic, an attitude may not lead him to overlook the human or humane feature? This broad balance can be acquired, for it is seen in the best of our practitioners and specialists.

HEALTH PROTECTION AND CARE FOR THE LESS THAN TWO THOUSAND DOLLAR GROUP

By Nathan G. Hale, M.D.
Sacramento

THE depression has created the necessity of federal aid for millions of destitute families and, by so doing, has established a new economic control over industry and commerce.

The medical profession cannot ignore this changing condition as there now appears to be a widespread dissatisfaction with the present bargaining status between patient and physician. The problem of how to meet this change is paramount.

COMPULSORY HEALTH INSURANCE NOT ADAPTED TO THE UNITED STATES

Compulsory health insurance is not suited to our form of democratic government. Defined, it is something like this: A system that requires the employee to contribute from his wages whether sick or not. The employer is also similarly obligated. This creates a fund for sickness placed under centralized supervision, with additional government taxation to meet any financial deficiency. Out of this fund the doctor is paid usually on a contract basis. (This type of insurance does not include industrial accident insurance.)

CARE OF INDIGENTS A GOVERNMENTAL FUNCTION

Medical care of indigents or the poverty stricken has been a recognized responsibility of the government in the United States, aided by the gratuitous service of the local physicians. The effect of the depression has been to increase this number from an insignificant fraction of the population to the now alarming proportion of about 20 per cent. The many millions of unemployed make it impracticable for private charity or the private physician to carry on the economic and medical care without reimbursement from some government source.

Public hospitals have too many patients and private hospitals too few. Public hospitals are about 85 per cent filled, which is capacity, while private hospitals are 52 per cent filled. The public hospital patronage, therefore, has increased 25 per cent in the last eight years.

TYPES OF PLANS FOR MEDICAL SERVICE

Physicians have ideas as to how to bring medical service within the reach of the average American wage-earner. Some of the plans now are as follows:

1. Voluntary forms of medical insurance which offer a limited protection to a few and limit the amount of protection to those insured.
2. Fraternal associations and their method of sick relief.
3. Sick benefit funds.
4. Trade-union funds.
5. Various other forms.

All the above mentioned cater to a limited group, usually have a faulty organization, and are costly in proportion to the benefits derived.

COST OF MEDICAL CARE IN THE UNITED STATES

In the United States the cost of medical care has been estimated between $50 and $60 a year per person. Can the poor ever pay enough to cover the cost of adequate medical care? Forty-nine per cent of our families have yearly incomes of less than $2,000. Four per cent of their estimated income would amount to $22 per person, which is considered the upper limit for the less than $2,000 class to pay for medical care. The additional $38 per year would have to be obtained elsewhere adequately to care for this less than $2,000 income group. Local taxation would necessarily prove a great burden to certain communities where this group predominates. Therefore, a plan devised with a favorable outlook for the less than $2,000 group will have to contain the elementary principles of national health insurance.

The cost of medical care is increasing. Forty per cent of the gross income of the physician is spent on overhead. The physician cannot assume this added cost of medical care. He is paying the same proportion of taxes as all other citizens, and under the present method assumes responsibility for the care of this group, and its return to health and economic balance without adequate compensation.

Therefore, it becomes a necessity for the Government to aid. This can be done without jeopardizing the family pride or depriving the doctor of his individuality or producing a politically submerged physician.

AUTHOR'S PLAN AND SUGGESTIONS

The Plan: A Health Insurance Subsidy

Congress to establish a Subsidy Fund for illness; the less than $2,000 income class to borrow, a part or all, of the amount necessary, at a low rate of interest, to meet their obligation for drugs, hospital care and physician's fees. Time for payment of the obligation should be extended as conditions warrant, after an investigation of the patients; and the patient's relatives, ability to pay.

The doctor's fee in this group of cases should be set before the contract is made, as in industrial accident cases.

This less than $2,000 class to include the now so-called indigents.

The Government to have control of all hospitals that are subsidized by the Government, which would include all private as well as all public hospitals. The private hospitals are known to be only partially filled (52 per cent), while the Government hospitals are overflowing at 85 per cent. This differential would take care of thousands of beds throughout the country and not require Government expenditure for new hospitals.

If the Government subsidized the vacant beds in private hospitals it should have a local representative on the board of directors. The amount to be paid for beds in private hospitals should be similar to the sum required for the maintenance of Government hospital beds, provided the physical plants are equally good.

Finally, the Government to gradually assume control of those hospitals desiring such a procedure by first amortizing the hospital indebtedness and next acquiring the stock at its present market value.

The Government to Purchase All Drugs and Supplies at Cost Plus:

Few people realize that the sick purchase $715,000,000 worth of drugs annually, which exceeds the total earnings of hospitals and physicians annually. Less than one-third of these drugs are purchased on the advice of physicians, thus making a presumably needless expenditure of $238,000 annually. The less than $2,000 income class is prone to buy patent medicines, often hindering its physical progress and increasing the cost of its sick care in an effort to make a short cut to health. In other words, $360,000,000 annually is spent by patients for treatment after self-diagnosis, and it is not unreasonable to suppose that the less than $2,000 income class also spends its share needlessly. If they represent 40 per cent of the people, it would amount to $144,000,000. The right to purchase at cost plus all recognized or prescribed drugs and other sickness supplies would be a tremendous economic saving for the less than $2,000 class.

Free Choice of Physicians:

Free choice of physicians by all patients, with the right to change physicians as prescribed in medical ethics. This is really the Magna Charta of the patient during his illness, without which political intervention and other intrigues might become a serious detriment to the service of the sick.

Fee Payment of the Doctor:

The fee schedule to be fixed by the Government and the American Medical Association with final approval by the doctors. This simplifies the matter and assures the physician of a living income. In addition, it creates a liaison between the Government and the physician that can be mutually beneficial. Fee payment of the doctor by the Government for this group would redistribute the doctors of the country, not according to the wealth of the community as they are now distributed, but accord-

ing to the density of population. Sickness under the Government Subsidy for illness is not to be associated with relief of the economic status of the patient. It is essential to keep these separate.

There should be lay control of sick benefits, planned from previous experience gained by the methods of lodges and industrial accident reports on the subject. We, as physicians, then devote all our interests to the physicial relief, not on the patient's ability to recover money for his illness.

Physical Examination Twice Yearly:

Physical examinations required twice yearly of all the less than $2,000 income group, thus preventing extensive inroads of disease before being recognized by the patient, causing an additional economic burden necessitating more serious operative procedures or longer medical care for return to normal.

The United States Public Health Service to be used by the Government for the establishment of local health officers devoting their entire time to preventive medicine or prevention of disease by immunization and control of plagues, epidemics or other possible sources of infection.

COMMENT

Such a plan as the above must have just reason to be born and also be practical enough to exist.

Let us review the good points. If the good is better than the evil of such a plan its principle should be adopted.

1. The members of this group, the less than $2,000 income group, are not in any sense of the word charity patients, yet many, due to extenuating circumstances, are forced to use county hospital service. Under the above plan they will receive adequate care without the stigma of being a county hospital patient.

2. They will have free choice of physicians which they often do not have at present.

3. Their burden to the United States is lessened economically.

4. It eliminates from this group the middle man's profit in drugs.

5. It fills the waste space in private hospitals and relieves over-crowding in public hospitals.

6. The partially unemployed do not have to become charity patients.

7. The Government's obligation to its people is fulfilled in time of need, with reimbursement of the Government by those in this class who are financially responsible.

8. Those of this less than $2,000 group, who are healthy are not taxed for the group of unhealthy, except through Government subsidy which the entire nation has to pay.

9. The fact that indigents, after restoration to health, are to be held financially responsible for debts incurred, is important. The plan will soon classify the indigent group who are in this less than $2,000 group into the productive and nonproductive by judging their future ability to pay. There will be a definite group of nonproductive individuals who are mentally or physically incapacitated due to congenital or acquired illnesses, and for this group some definite program can then be logically outlined. As it is now, we do not have any idea how many of these incompetents we have or what we should do with them. They can pile up financial and marital obligations without restraint to the detriment of the future of our Government.

10. We have simplified the care of the sick; we have placed the burden where it economically belongs without creating a political bureaucracy.†

Medico-Dental Building.

THE VALUE OF DIET ANALYSIS IN PEDIATRIC PRACTICE*

By RIETA C. HOUGH, M.D.
AND
MICHAEL J. WALSH, M.Sc.
San Diego

DISCUSSION *by E. Earl Moody, M.D., Los Angeles; Helen B. Pryor, M.D., Stanford University; Helen Hopkins, M.D., Los Angeles.*

DIET, diet fads, and fancies have become almost a phobia with the public in general the past few years. Therefore, a review of the actual facts concerning diet and the method of determining a correct and adequate one does not seem amiss at this time.

In order to follow rapidly the methods used, let us briefly review the basic facts which we all know but which at times slip from our memories.

FOOD REQUIREMENTS

For adequate nutrition every individual has definite needs of energy foods: proteins, fats, carbohydrates; tissue-building foods; minerals; vitamins.

ENERGY REQUIREMENT FOR CHILDREN

Children and adolescents have a relatively higher requirement per pound of body weight than adults, due to the demand for growth.

Childhood energy requirement must provide for energy expenditure plus energy required for growth.

PROTEINS

Children and adolescents require 0.9 to 1.2 grams per pound of body weight, depending upon activity.

CARBOHYDRATES

About 50 to 60 per cent of the total calories should be in carbohydrates.

FATS

The total calories, minus the sum of protein and carbohydrate calories, give us the fat requirement.

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†Author's Note.—This apparently is opposed to my previous policy when socialized medicine was introduced in the State Legislature several years ago. Since then there has been a rapid economic change, with political groups catering to the votes of the multitude, with medical placebos at the expense of the doctor. Therefore, some method must be evolved by the doctors which will preserve their personal relationship with the patient and give them just recompense for services rendered the group mentioned in this article.

I wish to acknowledge facts and statistics obtained from the Economic Survey of the California State Medical Association, and additional facts and data obtained from literature of the California Taxpayers' Association.

* Read before the Pediatric Section of the California Medical Association at the sixty-sixth annual session, Del Monte, May 2–6, 1937.

TABLE 1.—*Average Daily Energy Requirement for Children*

Age 1 to 19 Years		
Age Years	Calories	
	Boys	Girls
1	1,050	900
2	1,200	1,100
3	1,250	1,200
4	1,350	1,250
5	1,450	1,350
6	1,700	1,600
7	1,850	1,700
8	2,000	1,900
9	2,200	2,100
10	2,400	2,250
11	2,450	2,400
12	2,650	2,550
13	3,000	2,750
14	3,200	2,700
15	3,350	2,600
16	3,350	2,500
17	3,300	2,450
18	3,000	2,300
19	3,000	2,300

Adapted from report, Medico-Actuarial Mortality Investigation.

MINERAL REQUIREMENT

The ratio of calcium intake to intake of phosphorus is most important and should be between 1 to 1½, and 1 to 2.

Calcium

Minimum, 1010 milligrams.

Optimum, 2000 milligrams, plus.

Phosphorus

Minimum, 1980 milligrams.

Optimum, 3000 milligrams, plus.

IRON REQUIREMENT

According to Sherman, Rose and others, normal adults require 10 milligrams daily.

The most recent studies on children up to the age of six indicate an average iron requirement of 0.275 milligram per pound of body weight. To insure adequacy the diet should contain one and one-half times the minimum requirement, or 15 to 18 milligrams daily.

COPPER AND MANGANESE REQUIREMENT

The allowance should be 0.014 milligram per kilogram. The requirement is nearly always met even in the poorest diets. Children should have 18 milligrams daily.

IODIN REQUIREMENT

This is usually expressed in gammas, with one gamma equal to 0.001 milligram.

The authorities are not in agreement regarding the iodin requirement. One gamma of iodin is a very small part (one thousandth) of a milligram, and yet you will find that it is quite common to get one-half gamma of iodin in an average portion of most of our foods.

According to balance studies, the Swiss authority, Von Fellenberg, has calculated the human requirement at 14 gammas daily.

The British authorities, Orr and Leitch, place the adult daily requirement at 45 gammas.

Based on goiter prophylactic studies, the American authorities, Marine and Kimball, estimate the requirement at 2 milligrams for adolescents daily.

Based on rat studies, Thompson (Toronto) found that a level of 1280 gammas per 100 grams of diet was necessary to completely prevent thyroid hyperplasia. This study showed the iodin requirement to be greater on high calcium diets.

Also based on rat studies, the South Carolina group, Remington and associates, interpolated their findings to show that the average daily human requirement is 120 gammas. However, for safety, 2000 to 3000 gammas should be the daily requirement.

SODIUM, POTASSIUM, CHLORIN, SULPHUR

The authorities assume these are adequate in the American diet, but it is doubtful if this is true of potassium.

VITAMINS

A—One International unit is equivalent to 0.6 gammas of carotene.

Requirement

Minimum, 1500 International units.

Optimum, 7500 to 9000 International units.

B—The unit of potency of vitamin B is the Chase-Sherman unit, *i. e.*, the amount of vitamin B required to produce a gain of 3 grams per week in a B depleted rat.

Requirement

Minimum, 100 Sherman units.

Optimum, 200 Sherman units.

C—The International unit is equal to 0.05 milligram of ascorbic acid.

Requirement

Minimum, 150 International units.

Optimum, 200 International units (for infants and children).

G—The only available unit is the Sherman-Bourquin unit, which is the amount required to produce a gain of 3 grams per week in a G depleted rat.

Requirement

Minimum, 60 Sherman-Bourquin units.

Optimum, 100 Sherman-Bourquin units (in infants and children).

D—U. S. P. XI and the International unit represent the vitamin D potency of 0.025 gammas of calciferal. The Steenbach unit equals 3.37 International units.

TABLE 2.—*Vitamin Requirement Summary*

(Optimum Dietary Allowance)

	A International Units	B Sherman Units	C International Units	G Sherman Units	D International Units
Infants	7,500	100	200	100	1,070
Children	7,500	200	200	100	1,070
Adolescents	9,000	400	400	200	1,300

Requirement

Minimum, 450 International units.

Optimum, 900 International units.

The remaining vitamins have as yet no units of measurement or potency.

ACID-BASE BALANCE

The acid-base balance means the ratio between the amounts of acid-ash foods to the amount of alkaline-ash foods in the diet. (This is not to be confused with the acid-base equilibrium, p^H range, in the blood and other body fluids.) The ratio should be 1 to 3 or 4.

FUNCTIONS OF THE ACID-BASE BALANCE

1. To supply the source material for maintaining acid-base equilibrium of the body.

2. To prevent accumulation of organic acid, etc., and hence avoid acidosis.

3. To insure an adequacy of mineral.

WATER

The water requirement is four to eight glasses daily.

With these facts in mind, let us proceed to the building up of a balanced diet. (Table 3.)

That many of the diets given in textbooks on pediatrics are inadequate, is illustrated in Tables 4 and 5.

In building up a balanced diet the mother is instructed to keep a complete and accurate diet list for one week, household measurements being used. A summary is made and each food broken down into its component parts and the columns added and divided by seven. This gives a daily average, which is compared with the known requirement for the child's height, weight, and age.

The following cases have been selected to illustrate the method and value of diet analysis.

All diets were computed by use of the Di-Calator, copyrighted by M. J. Walsh of San Diego.

REPORT OF CASES

CASE 1.—P. B., female, age six years, height 44½ inches, weight 43 pounds. (Chart 7–10A and 7–10B.) This patient had been having asthmatic attacks over a period of three years. Sensitization tests had been done and all positive foods removed from her diet. Despite this the asthmatic attacks were occurring regularly every one to two weeks.

TABLE 3.—*Building Up a Desirable Balanced Diet Foundation*

Minimum for Children	Protein	Fat	Carbohydrates	Calories	Calcium	Phosphorus	Iron	Copper	Iodin	Acid	Base	Vitamin A	Vitamin B	Vitamin C	Vitamin G	Vitamin D
One pint whole milk	16.0	19.2	24.0	328	576	448	1.16	.08	32.0		11.2	1,104	88	160	192	4
One egg, 50 grams	6.7	5.3	.74	74	34	90	1.3	.12	1.6	5.5		950	27		65	
One potato, 100 grams	2.2	.1	18.4	83	14	58	.91	.17	1.6		7.0	35	28	100	20	
One raw green vegetable, 50 grams	.6	.2	1.5	10	22	21	.85	.02	.4		3.7	250	17	30	25	
One cooked vegetable, 80 grams	1.8	.2	5.9	34	37	42	.74	.08	1.2		4.3	340	28	60		
One raw fruit, 100 grams	.4	.5	14.2	125	7	12	.5	.01	1.6		3.7	52	25	100	20	
Two slices whole wheat bread and butter (or equivalent in cereal)	5.2	21.8	24.8	324	30	96	1.54	.26	.3	1.8		1,222	80			
Total	32.9	47.3	88.8	978	720	767	6.50	.74	39.2	7.3	29.9	3,953	293	450	322	4
Add additionally for enrichment:																
One pint whole milk	16.0	19.2	24.0	328	576	448	1.16	.08	32.0		11.2	1,104	88	160	192	4
One extra fruit, 100 grams	1.3	1.3	22.0	105	9	31	.29	.21	1.6		5.6	350	38	170	35	
Total	50.2	67.8	134.8	1,411	1,305	1,246	7.95	1.03	72.8	7.3	46.7	5,407	419	780	549	8
Four ounces beef, 112 grams	33.9	6.9		205	8	144	2.00	.09	.6	11.8		18	19		100	
Total	84.1	74.7	134.8	1,616	1,313	1,390	9.95	1.12	73.4	19.1	46.7	5,425	438	780	649	8

TABLE 4.—*Example Ideal Diet for Infant One Year, Holt & McIntosh, Tenth Edition*

	Protein	Fat	Carbohydrates	Calories	Calcium	Phosphorus	Iron	Copper	Iodin	Acid	Base	Vitamin A	Vitamin B	Vitamin C	Vitamin G	Vitamin D
6 a. m.																
Milk, 8 ounces	8.0	9.6	12.0	164	288	224	.58	.04	16.0		5.6	552	44	80	96	2
10 a. m.																
Cereal, four tablespoons, one-quarter cup	1.35	.6	5.5	33	5.5	32.5	.32	.08		1.0						
Milk, 8 ounces, 240 grams	8.0	9.6	12.0	164	288	224	.58	.04	16.0		5.6	552	44	80	96	2
One slice whole wheat bread and butter	2.6	10.9	12.4	162	15	48	.77	.13	.4	.9		611	40			
2 p. m.																
Chopped meat, 2 tablespoons, 30 grams	6.4	5.1		72	2	43	.6	.03	.2	3.5		5	6		30	
Potato, 2 tablespoons, 30 grams	.7		6.1	28	5	19	.30	.06	.5		2.0	12	9	33	7	
Green vegetables, 3 tablespoons, 40 grams	.8	.1	1.3	10	27	27	1.54	.05	.6		10.8	1,500	14		40	
Milk, 6 ounces	6.0	7.1	9.0	104	216	168	.43	.03	12.0		4.1	414	32	60	72	3
6 p. m.																
Cereal, 4 tablespoons, ¼ cup cream of wheat	1.1		8.2	38	4	122	.19	.04	.2	1.2						
Milk, 8 ounces	8.0	9.6	12.0	164	288	224	.58	.04	16.0		5.6	552	44	80	96	2
One cracker	1.0	.9	7.2	41	2	20	.18	.05		.8						
Cooked fruit, 2 tablespoons, 30 grams	.1	.2	10.0	41	3	5	.12				1.5					
Total	44.05	53.7	95.7	1,021	1,143.5	1,156.5	5.79	.59	61.9	7.4	35.2	4,198	233	333	417	10
Normal requirement	24.0	47.0	132.0	1,050	1,000	1,500	9 mgs.	.16 mg.	100.0	1 to 3		7,500	200	200	100	1,000

Comments on above diet: Calcium-phosphorus ratio 1 to 1.2; phosphorus 24 per cent deficient in comparison with calcium present; iron 39 per cent deficient; vitamin D 99 per cent deficient; iodin at least 38 per cent deficient.

TABLE 5.—*A Day's Dietary for a Child of Five Years—Royster*

	Protein	Fat	Carbohydrates	Calories	Calcium	Phosphorus	Iron	Copper	Iodin	Acid	Base	Vitamin A	Vitamin B	Vitamin C	Vitamin G	Vitamin D
Breakfast																
One orange	1.2	.3	17.4	77	68	32	.78	.12	2.4		8.4	110	65	780	30	
Cooked oatmeal	2.7	1.2	11.1	66	11	65	.63	.16	.5	2.0						
One egg	6.7	5.3		74	34	90	1.3	.12	1.6	5.5		950	27		65	
One slice whole wheat bread	2.4	.2	12.4	62	13	46	.75	.13	.2	.9		11	40			
Butter, one square	.2	10.7	1.0	100	2	2	.02		.2			600				7
Milk, one six-ounce glass	6.0	7.1	9.0	104	216	168	.43	.03	12.0		4.1	414	32	60	72	3
Dinner																
Cream of pea soup	5.6	6.6	12.2	128	100	140	.68	.02	2.7		1.8		5		25	
Beef, one ounce	7.5	1.5		45	2	36	.5	.02	.2	.3		4	28	100	20	
One baked potato	2.2	.1	18.4	83	14	58	.91	.17	1.6		7.0	35	14		16	
Canned tomatoes	.9	.4	3.9	23	11	26	.6	.07	1.6		5.6	450	40			
One slice whole wheat bread and butter	2.6	10.9	12.4	162	15	48	.77	.13	.4	.9		611				
Rice pudding	4.5	3.6	13.0	98	65	130	.2	.2	.5	.3						
Supper																
Apple sauce	.6	.7	45.0	186	13	22	.56				6.7					
One slice whole wheat bread and butter	2.6	10.9	12.4	162	15	48	.77	.13	.4	.9		611	40			
Corn bread	2.3	.5	18.9	89	5	48	.23	.05	1.2	1.2						
Milk, 4 ounces	4.0	4.8	6.0	82	144	112	.29	.02	8.0		2.8	276	22	40	48	1
Total	52.0	64.8	192.1	1,541	708	1,071	9.42	1.24	33.5	12.0	36.4	4,072	313	980	276	11
					1 to 1.5					1 to 3						
Normal requirement	47.0	60.0	181.0	1,450	1,000	1,500	18.0	.18	2,000.0			7,500	200	200	100	1,070

Comments: Calcium and phosphorus 30 per cent deficient; iron 50 per cent deficient; iodin 98 per cent deficient; vitamin C 46 per cent deficient; vitamin D 100 per cent deficient.

TABLE 6.—*Seven-day Diet of P. B. Sex, Female. Age 6*

	Protein	Fat	Carbohydrates	Calories	Calcium	Phosphorus	Iron	Copper	Iodin	Acid	Base	Vitamin A	Vitamin B	Vitamin C	Vitamin G	Vitamin D
Apple sauce, one cup, 200 grams	.8	.1	28.4	250	14	24	1.0	.02	3.2		7.4	104	50	200	40	
Oatmeal, two and one-half cups, 500 grams	13.5	.6	55.5	330	55	325	3.15	.8	2.5	10.0						
Bean soup, 300 grams	15.9	12.6	30.0	294	150	210	1.2	.3	3.6		15.0					
Lettuce, 1,000 grams	12.0	4.0	30.0	200	440	420	7.0	.4	1.6		74.0	5,000	340	600	500	
Mayonnaise, 15 teaspoons, 75 grams	1.0	56.0	2.0	515	10	30	.4			1.0						
Bacon, 12 slices, 60 grams	21.6	27.3		345	6	129	1.8	.3	7.2	7.2					48	
Eggs, four, 200 grams	26.8	21.2		296	136	360	5.2	.48	6.4	22.0		3,800	108		260	
Sugar, 25 teaspoons, 100 grams			100.0	400												
Canned cherries, one-quarter cup, 25 grams	.3	.2	4.2	20	5	8	.1	.08	.4		1.1					
Raw apples, six, 600 grams	2.4	3.0	85.2	750	42	72	3.0	.03	9.6		22.2	312	150	600	120	
Peas, one-half cup, 120 grams	8.4	.6	20.3	120	33	153	2.52	.29	1.8		2.0	540	130		15	
Baked sweet potato, 100 grams	1.8	.7	27.4	123	19	45	.9	.15	1.6		6.7	300	28	100		
Baked squash, 100 grams	.6	.1	3.4	17	18	14	.35	.02	1.6		2.8					
Margarine, two tablespoons, 32 grams	.4	25.4		240												
Fried rabbit	23.8	3.7		130	12	232	3.2	.35	.5	10.7						
Walnuts, six, 35 grams	6.3	22.4	4.5	249	21	126	.73	.35	7.0	2.8						
Corn starch pudding, 200 grams	5.8	7.0	42.0	254	210	162	.42	.2	1.0		3.2					
Small glass grapefruit juice	1.2	.2	24.4	104	42	40	.54	.06	3.2		11.2	140		1,100	40	
Meat loaf, 110 grams	19.2	13.7	8.65	239	18	140	1.87	.18	.85	13.86		1,295	54	50	125	
Noodle soup, two-thirds cup, 160 grams	1.0	.8	2.0	22	1	12	1.0	.01	1.8	1.0						
Two hard-cooked eggs, 100 grams	13.4	10.6		148	68	180	2.6	.24	3.2	11.0		1,900	54		130	
Apricots, canned, 50 grams	.5	.2	6.7	29	7	13	.3		.8		1.9	26	13	50	10	
Celery, 80 grams	.9	.1	2.6	15	62	30	.5	.01	1.2		6.2					
Two lamb chops, 100 grams	31.0	7.5		196	11	200	1.6	.4	.5	9.6		8	9		45	
Scrambled eggs, 45 grams	4.8	4.2	.7	58	39	72	.89	.08	1.9	4.0		510	10		48	
Cream of pea soup, two cups, 400 grams	11.2	13.2	24.4	256	200	280	1.36	.04	5.4		3.6					
Canned corn, 80 grams	2.2	1.0	15.2	78	5	82	.38	.08	1.2	1.4						
One grapefruit, 200 grams	31.2	.2	24.4	104	42	40	.54	.06	3.2		11.2	140		1,100	40	
Canned pears, one cup, 200 grams	1.2	1.0	28.2	126	30	56	.70	.2	3.2		8.4					
One slice rock cod, 100 grams	18.7	.5		83	10	187	.34	.47	100.0	8.4						
Beets, 120 grams	2.0	.1	11.8	54	36	46	2.84	.24	1.8		13.0	26		60	60	
Cabbage, 40 grams	.6	.2	2.2	13	18	12	.14	.02	.6		2.4	7		140	20	
Bean soup, 100 grams	5.3	4.2	10.0	98	50	70	.4	.1	1.2		5.0					
Chocolate pudding, 400 grams	14.0	26.4	105.2	716	408	424	1.64	1.2	2.0		5.6					
One steak, four ounces, 112 grams	33.9	6.9		205	8	144	2.0	.09	.6	11.8		18	19		100	
Fig juice, 100 grams	1.4	.4	17.9	81	53	36	.79	.08	1.6		6.5	45				
Total	305.1	282.6	717.25	7,158	2,279	4,374	51 40	7.33	182.25	114.76	209.4	14,171	955	4,000	1,601	0000
One-day average	43.6	40.3	102.46	1,022	326	625	7.34	1.05	26.04	16.39	29.9	2,024	136	571	228	
					1 to 1.9					1 to 1.8						

Comments: Energy foods 36 per cent deficient; protein 10 per cent deficient; fat 40 per cent deficient; carbohydrates 49 per cent deficient; calcium 67.5 per cent deficient; phosphorus 69 per cent deficient; iron 19 per cent deficient; iodin 98 per cent deficient; alkaline foods 39 per cent deficient; vitamin A 75 per cent deficient; vitamin B 32 per cent deficient; vitamin C 25 per cent deficient; vitamin G 25 per cent deficient; vitamin D 100 per cent deficient.

TABLE 7.—*Steps in Attempting to Correct Previous Allergic Diet (P.B.)*

	Protein	Fat	Carbohydrates	Calories	Calcium	Phosphorus	Iron	Copper	Iodin	Acid	Base	Vitamin A	Vitamin B	Vitamin C	Vitamin G	Vitamin D
Daily average	43.6	40.3	102.46	1,022	326	625	7.34	1.05	26.04	16.39	29.9	2,024	136	571	228	
					1 to 1.9					1 to 1.8						
Normal requirement	48.0	67.0	200.0	1,600	1,000	2,000	19.0	.15	2,000.0	1 to 3		7,500	200	750	120	900
E. G.: Add dicalcium phosphate (60 grains, 4 drams)					1,000	820										
9 alphabet tablets					29	32	15.5	.17	3,000.0		2.0	1,500	110	150	60	450
1 A and D capsule												13,300				1,850
Totals					1,355	1,477	22.84	1.22	3,026.0	16.39	31.9	16,824	246	720	288	2,300

Approximate deficiencies: Energy foods 36 per cent deficient; protein 10 per cent deficient; fat 40 per cent deficient; carbohydrates 49 per cent deficient; calcium 67.5 per cent deficient; phosphorus 60 per cent deficient; iron 19 per cent deficient; iodin 98 per cent deficient; alkaline foods 39 per cent deficient; vitamin A 75.5 per cent deficient; vitamin B 32 per cent deficient; vitamin C 25 per cent deficient; vitamin G 25 per cent deficient; vitamin D 100 per cent deficient.

Add concentrates which will remedy the deficiencies of calcium, phosphorus, iron, iodin and vitamins A, B, C, G and D.

Diet analysis revealed the following:

	Per Cent Deficient
Energy foods	36
Protein	10
Fat	40
Carbohydrates	59
Calcium	67.5
Phosphorus	69
Iron	19
Iodin	98
Vitamin A	75.5
Vitamin B	32
Vitamin C	25
Vitamin G	25
Vitamin D	100

Corrections were made as follows: A and D capsule, one; dicalcium phosphate, 60 grains; Alphabet tablets, nine; plus increase in alkaline foods.

The composition of the Alphabet tablets is as follows:

Nine tablets contain:
1,800 U. S. P. units vitamin A
110 Sherman units vitamin B
175 International units vitamin C
900 U. S. P. XI units vitamin D
110 Sherman units vitamin G
2,500 gammas iodin
15.5 milligrams iron
.15 milligram copper
.10 milligram manganese
Also generous amounts of potassium, sodium and the trace elements.

* * *

CASE 2.—R. G., male, age 11½ years, height 59 inches, weight 73 pounds (normal 88 pounds); 15 pounds underweight.

Diet analysis:

	Per Cent Deficient
Protein	22
Fat	15
Carbohydrates	40.5
Total calories	27.5
Calcium	25
Phosphorus	45
Iron	55
Iodin	98
Alkaline food	35
Vitamin A	45
Vitamin B	59
Vitamin C	45
Vitamin G	10
Vitamin D	95

It was necessary here to increase fundamental foods as follows: Milk, one quart; add one egg daily; add whole-wheat bread or whole-wheat cereal; one citrus fruit daily; two generous servings of green vegetables; one generous-sized potato; one fruit, like bananas or apples; meat with iron, iodin, and vitamins A and D.

With these changes the patient gained 4¼ pounds in two months and 12 pounds in six months.

* * *

CASE 3.—B. W., female, age eight. Referred by dentist because of caries and poor condition of teeth. Mother also complained about slowness in gaining weight.

Diet analysis:

	Per Cent Deficient
Protein	12
Fat	25
Carbohydrates	51
Total energy	36
Calcium	30
Phosphorus	69
Iron	57
Iodin	99.5
Vitamin A	68
Vitamin B	59
Vitamin C	7
Vitamin G	adequate
Vitamin D	10

Acid-base ratio 50 per cent deficient in alkaline foods.

Corrections:

Add one pint of milk, two squares of butter, citrus fruit, one green vegetable, one potato, and six Alphabet tablets daily.

TABLE 8.—*Seven-day Diet of S. S., Age 8½, Weight Fifty Pounds; Normal Weight Sixty-two Pounds; Twelve Pounds Underweight*

	Protein	Fat	Carbohydrates	Calories	Calcium	Phosphorus	Iron	Copper	Iodin	Acid	Base	Vitamin A	Vitamin B	Vitamin C	Vitamin G	Vitamin D
Two oranges	2.4	.6	34.8	154	136	64	1.56	.24	4.8		16.8	220	130	1,560	60	
Orange juice, 400 grams	2.4	.4	28.4	156	116	64	.96	.32	6.4		18.0	280	180	2,080	80	
Four tomatoes	3.6	1.6	15.6	92	44	104	2.4	.28	6.4		22.4	2,380	112	2,080	64	
Three-quarters waffle	4.8	1.5	39.3	195	33	114	.66	.36		3.3						
Butter, 175 grams	2.1	149.1		1,393	28	28	.35		28.0			8,400				
Milk, 3,000 grams	99.0	120.0	150.0	2,070	3,600	2,790	7.2	.6	200.0		69.0	6,900	540	1,800	1,200	
Eleven slices bread	25.3	3.3	146.3	715	77	253	2.42	.99	1.1	16.5		33				
Peanut butter, 16 grams	4.7	7.4	2.7	97	13	72	.4			.7						
Sugar, 25 grams			25.0	100												
Two egg yolks	7.8	16.6		182	68	262	2.54	.06	1.6	5.5		950	28		66	
Ice cream, 200 grams	8.0	28.0	40.0	444	300	240	.42	.04	8.0		.4					
Potatoes, 200 grams	4.4	.2	36.8	166	28	116	1.82	.34	3.2		14.0	52	28		40	
Summer squash, 50 grams	.3		1.7	8	9	7	.17	.01	.8		1.4					
Cream, 45 grams	1.2	9.0	2.1	93	42	36	.09		6.0			2,160				
Cheese, 90 grams	26.1	32.4	.3	396	837	615	1.23	.15	12.0	4.8		2,400				
Beets, 40 grams	.7		3.9	18	12	16	.95	.08	.6		4.4	7			40	
Four apricots	1.1	.3	13.4	58	14	25	2.5	.18	1.6		6.1					
Spinach, 100 grams	2.1	.3	3.2	24	67	68	3.85	.12	1.6		27.0	3,675	35		100	
Ground round, 140 grams	33.9	6.9		205	8	144	2.0	.09	.6	11.8		18	19		100	
Scrambled eggs, 90 grams	9.7	8.1	1.3	116	78	143	1.79	.16	3.8	7.0		1,020	20		96	
Two ears corn	4.4	2.0	30.4	156	10	164	.76	.16	2.4	2.8						
Chocolate, 10 grams	1.3	4.9	3.0	61	9	45	.27	.25								
Two plums	.7	.2	12.4	54	20	32	.56	.04	1.6							
Spaghetti, 100 grams	2.7	.1	16.9	80	5	32	.21		2.1							
Two eggs	13.4	10.6		148	68	180	2.6	.24	3.2	11.0		1,900	54		130	
Fresh peas, 80 grams	2.8	.2	6.7	40	11	51	.84	.09	.6			180	40		5	
Lettuce, 75 grams	.9	.3	2.2	15	33	31	.52	.03	1.2		5.5	375	25	45	37	
Cream of tomato, 400 grams	12.0	30.8	28.4	436	360	304	1.52	.04	5.4		10.8					
Beets, 20 grams	.3		1.9	9	6	8	.47	.04	.3		2.2	3			20	
Carrots, 80 grams	.9	.3	7.4	37	45	37	.51	.06	1.2	8.6	8.6	1,875	10		40	
One radish	.1		.7	3	1	3	.1	.02	.2		.3					
One candy bar	4.8	21.0	30.7	331	26	127	.88	.4			1.0					
Rice krispies, 200 grams	12.6	.7	189.0	798	21	21	5.67	.42	1.05	21.0						
One slice bacon	1.8	23.0		39		11	.15	.6	.6	.6					4	
One pear	.6	.5	14.1	63	15	26	.35	.1	1.6		4.2					
Eight dried cooked prunes	.3		17.1	69	7	15	.4	.02	.8							
Asparagus, 90 grams	1.4	.2	2.6	18	20	31	.8	.07	1.2		.6	72				
Roast beef, 28 grams	7.5	1.5		45	2	36	.5	.02	.15	2.9		4	5		25	
One baking powder biscuit	1.2	1.4	7.2	47	11	15	.1		.1	.7						
Molasses, 40 grams	.8		28.0	114	86	18	2.8	.8								
Raisins, 25 grams	.6	.8	19.0	86	16	33	.72	.05	.4		8.4					
Lemonade, 200 grams	.6	.4	4.8	20	16	4	.4	.02	.96		2.8		24	340		
White sauce, 25 grams	.9	3.0	2.1	39	26	30	.7	.04	.1		.2					
String beans, 90 grams	1.8	.2	5.9	34	37	42	.74	.08	1.2		4.3	255	14			
Whipped cream, 50 grams	1.6	12.0	2.8	124	56	48	.12		8.0			2,880				
Tuns, 50 grams	13.3	5.7		104	15	150	.7	.2	50.9	5.0						
Seven-day total	328.9	484.8	982.1	9,452	6,332	6,655	56.7	7.21	372.76	95.7	228.4	36,039	1,264	7,105	2,107	000
Average daily	47.0	69.0	140.0	1,350	904	950	8.1	1.03	53.0	13.7	32.6	5,148	180	1,015	301	
					1 to 1.08						1 to 2.35					

Comments: Protein 17 per cent deficient; fat 10 per cent deficient; carbohydrates 33 per cent deficient; calories 25 per cent deficient; calcium 38 per cent deficient; phosphorus 66 per cent deficient; iron 51 per cent deficient; iodin 99 per cent deficient; alkaline food 34 per cent deficient; vitamin A 31 per cent deficient; vitamin B 60 per cent deficient; vitamin C adequate; vitamin G adequate; vitamin D 100 per cent deficient.

CASE 4.—V. P., female, age 16, height 66½ inches, weight 115 pounds (average 128). Referred by a dentist for diet analysis because of dental caries, with additional complaints made by mother of exhaustion, poor appetite, under weight, and subnormal temperature.

Diet analysis:

	Per Cent Deficient
Energy foods	40
Protein	44
Fats	35
Carbohydrates	40
Calcium	48
Phosphorus	50
Iron	54
Iodin	99.5
Vitamin A	44
Vitamin B	50
Vitamin D	100

With corrected diet and rest period, this patient gained ten pounds in three months.

* * *

CASE 5.—S. S., female, age 8½ years, weight 50 pounds (normal 62); 12 pounds under weight. Complaint was inability to gain weight. Had been in preventorium for six months with weight stationary. (Table 8.)

Diet analysis:

	Per Cent Deficient
Protein	17
Fat	10
Carbohydrates	33
Calcium	38
Phosphorus	66
Iron	51
Iodin	99
Alkaline food	34
Vitamin A	31
Vitamin B	60
Vitamin C	adequate
Vitamin G	adequate
Vitamin D	100

With corrected diet this patient gained two and one-half pounds in two months and four and one-quarter pounds in four months.

COMMENT

From a series of twenty-five cases, selected at random from a larger group, the following deductions may be drawn. In children's diets the amount of protein is usually deficient. The acid-base ratio is frequently out of balance. The calcium-phosphorus ratio is frequently out of balance.

In no diet has there been an adequate supply of iron, the deficiency running from 35 to 75 per cent.

In no diet has there been an adequate supply of iodin, the deficiency running from 50 to 99 per cent.

In no diet has there been an adequate supply of vitamin A, unless the patient was taking a fish-oil preparation.

All diets, unless a fish oil was taken, and barring sunshine, were 100 per cent deficient in vitamin D.

IN CONCLUSION

Diet analysis is a valuable adjunct to pediatric practice, probably its greatest usefulness being in undernutrition, allergy, and dental problem cases.

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DISCUSSION

E. EARL MOODY, M. D. (829 South Alvarado Street, Los Angeles).—We are very grateful to Doctors Hough and Walsh for reminding us of some of our shortcomings. We all know better than to allow any of our cases, that are difficult to handle, to go for any length of time on deficient diets. Yet it's so easy to allow a child to drift on a diet which is not optimum, especially if the morbid condition for which the child consults us, is under control. We are also grateful to Doctor Hough for giving us such a good review of the essentials of a balanced diet. She has very clearly pointed out to us a method of diet analysis.

It is rather startling to see her analysis of diets, which have been published as being ideal and supposedly balanced, fall short of this balance when thoroughly analyzed. Perhaps these diets were not kept up to date in view of our modern knowledge of chemistry of foods, even though they were taken from very recent textbooks.

It has been our observation that children are very commonly deprived of sufficient minerals, vitamins, and proteins due to a poorly supervised diet. Such a deficiency, long continued, will bring an ultimate malnutrition, from which it would be most difficult to recover.

The object lesson of this paper is to challenge us to become more expert in our knowledge of dietetics, and to analyze more carefully the diet we offer children both in health and disease.

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HELEN B. PRYOR, M. D. (Stanford University).—We often hear of the plight of children who are undernourished because of the poverty of their parents. We do not always realize that a child may be malnourished when he lives in the midst of plenty.

I am glad that Doctor Hough has called our attention to the fact that malnutrition exists whenever a child's body is not receiving the materials necessary to its proper growth and development. And it is not the food available that determines a child's nutritional status, but only that which is eaten and utilized.

The way to be sure that a proper balance is being maintained is to analyze the weekly diets in the manner described by Doctor Hough.

I helped with the nutrition study of the children from families on relief in San Francisco, a few years ago, and analyses of their diets frequently showed deficient protein intake, probably because protein food is expensive.

In private practice, the nutrition problems and the "hunger strikers" were overwhelmingly linear-type children. In one study, we measured all the children who were brought in because of poor appetite or refusal to eat, and found that 82 per cent of them were definitely of linear type. Analysis of the diets of these children often showed a very high proportion of fat, indicating that the mothers of these slender-built children tried to change them into broad-built children by the forcing of high fat, high calory diets.

I was convinced of the folly of overstandardization in diets, as well as in other fields, when we found by experience that linear-type children responded best to low fat and low roughage diets.

A careful analysis of diets, then, is necessary to know just what a given child is getting, and this makes it possible to adjust his food to his individual needs.

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HELEN HOPKINS, M. D. (3875 Wilshire Boulevard, Los Angeles).—The authors have presented a method of evaluating the child's diet in relatively simple terms. Such a system could be used to advantage in those cases which show a congenital lack of interest in food and others which show decided food preferences resulting in dietary imbalance. If one is on the alert to discover food deficiencies which may develop under these circumstances, substitutions or additions may be made to the diet which would not only satisfy the child's basic physiological needs, but would make some appeal to the child. The authors have made a valuable contribution in suggesting that an exact inventory be made of the foods consumed over a given period of time. Such a study would not be necessary, however, if the child demonstrates a wholesome interest in food and if the mother follows suggestions made to her by the child's physician. I am asked almost daily, "Does my child still need to take cod-liver oil?" Such a question could be answered more convincingly if one knew the actual optimum requirements, and the child would be more apt to be supplied with the food factors needed for normal development.

MEDICAL SOCIETY MEMBERSHIP: SOME LEGAL PHASES*

Memorandum Opinion with Respect to the Power of a Medical Society to Grant or Deny Admission to Membership

Practically all of the decided cases concerning membership in medical societies involve expulsion or suspension of a member previously admitted to membership. Of course, the powers and duties of a medical society with respect to expulsion and suspension of a member are entirely different from the powers, privileges and duties relating to admission to membership. Hence, cases concerning expulsion or suspension are not helpful.

The few reported cases on the subject of admission to membership were decided many years ago and in each case unusual circumstances were present. Therefore, we will consider the general rules relating to admission to membership in voluntary associations before discussing those cases directly involving medical societies.

As a General Rule Admission to Membership in a Voluntary Association Is a Matter Within the Complete and Exclusive Control of the Association

A voluntary association has the power to enact by-laws governing the admission of members and to prescribe any qualifications it desires for eligibility to membership. 7 Corp. Juris. Section 56. The grant or refusal of membership to any applicant is a matter within the complete control of the organization acting pursuant to its by-law provisions. *Simons* vs. *Berry*, 205 N. Y. S. 442, 210 App. Div. 90; *Harris* vs. *Thomas*, 217 S. W. 1068. In other words, membership is a privilege which the society may accord or withhold at its pleasure, and a court of equity will not interfere to compel the admission of a person not regularly elected, even though rejection of his application may have been arbitrary and even though such rejection may prejudice material interests of the candidate. *Greenwood* vs. *Building Trades Council of Sacramento*, 71 Cal. App. 159, 233 Pac. 823; 7 Corp. Jur. Sec. 56-57. Thus, in the *Greenwood* case, the California District Court of Appeal held:

> The fact that one may suffer injury by reason of non-admission to membership in a voluntary association, affords no ground for relief.

* * *

Where, however, one has been duly elected to membership in an association but is arbitrarily denied admission after such election, such person acquires a legal right to membership which may be enforced by the appropriate remedy. *Hillery* vs. *Pedic Society of New York*, 179 N. Y. S. 62, 189 App. Div. 766. (In this case a negro applied for membership in a society organized to improve the practice of chiropody and was elected in accordance with the by-laws by a majority vote of the members. The chairman refused to declare him elected and at a later meeting his application was rejected, after the by-laws had been changed to provide that five adverse votes would constitute a rejection. The New York court held that the first vote constituted an election to membership which could not be reconsidered.)

* * *

The Rule that Admission to Membership Is a Matter Within the Complete and Exclusive Jurisdiction of a Voluntary Association Also Applies with Respect to Nonprofit Membership Corporations

Under Sections 595 and 598 of the California Civil Code, a nonprofit corporation composed of members may by means of regulations contained in its by-laws establish such qualifications and standards for admission to membership that it sees fit. Balentine, California Corporation Laws, 1938 Edition, pages 328-331. Hence, the fact that a medical society may be incorporated as a nonprofit corporation does not affect the applicability to it of the general rule governing voluntary associations that membership is a privilege which the society may accord or withhold at its pleasure.

* * *

Consideration of Cases Directly Concerning Medical Societies

Apparently the earliest case is *People* vs. *Medical Society of New York*, 3 Wendall 426, decided in 1830. It was there held that an initiation fee may be demanded from physicians and surgeons becoming members of county medical societies.

In New York there has been for many years a provision in the public health law under which physicians and surgeons in the several counties are entitled to meet together and form local units. The New York courts have held that this statutory provision confers upon every physician and surgeon in a county a *right* to membership in any medical society incorporated under the public health law. See *Ewald* vs. *Medical Society of County of New York*, 130 N. Y. S. 1024, 70 Misc. Reports 615.

This statutory provision is quite unusual and, of course, has the effect of limiting, so far as medical societies in the State of New York are concerned, the general rule that admission to membership is in the sole control of the societies.

The statute above referred to caused the New York court in 1857, to hold in the case of *People* vs. *Medical Society of Erie County*, 24 Barbour 570, that the power given by statute to medical societies to make by-laws and regulations relative to the admission and expulsion of members, though conferred in general terms, is not an arbitrary or unlimited power. It was further held that by-laws relative to admission of members could not be made contrary to or inconsistent with the laws of the state. Again in *People* vs. *Medical Society of Erie County*, 32 N. Y. 187, decided in 1865, it was held that a licensed physician having the prescribed qualifications for admission to the county medical society could not be excluded on the ground that he did not conform to the conventional rules of the society at a period antecedent to his application. The effect of this decision is clearly limited to the State of New York, because of the unusual statutory provisions contained in the public health law. In addition, it is quite doubtful that this case is sound law today even in New York.

In New Jersey the State Medical Association is incorporated by an act of the legislature as a quasi-public corporation. Hence, the election of applicants to membership therein is governed by the legislative act rather than by the general rules which have heretofore been stated. Thus, in *Watson* vs. *Medical Society of New Jersey*, 38 N. J. Law 377, decided in 1876, it was held that the rules governing admission to membership were to be determined by reference to the act of the legislature incorporating the state association.

In Alabama the State Medical Association is also incorporated by an act of the legislature and hence, has been held to be a quasi-public corporation. *Parke* vs. *Bradley*, 204 Ala. 456, 86 So. 28. Being a quasi-public corporation, the Alabama Medical Association may only make such rules governing admission to membership or expulsion therefrom as are consistent with the legislative acts applicable to the association.

Outside of the states of New York, New Jersey, and Alabama, no cases have been discovered in an exhaustive review of the authorities which relate to denial of admission to membership in a medical society. Quite clearly the cases in New York, New Jersey and Alabama arose because in those states specific statutes restricted the general power of a medical society to be the sole judge of admission to membership. There is no reason to believe that the decisions in New York, New Jersey, and Alabama have any force elsewhere. In the vast majority of the states, including California, where there are no statutes specifically governing admission to membership in medical societies, there can be no question but that the general rules relating to admission of membership in a voluntary association or a nonprofit association are applicable.

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* Editor's Note.—The letter which follows explains why this opinion was rendered by the office of Hartley F. Peart, legal counsel of the California Medical Association:

San Francisco, October 20, 1938.

Re: Opinion Requested Concerning Legal Rules Governing Admission to Membership in a County Society.

To the Editor:—I am enclosing herewith a memorandum opinion in regard to the above subject.

The enclosed was prepared by us after receipt of your letter of October 14 and enclosed copy of letter addressed to you by Doctor Maner, Secretary of the Los Angeles County Medical Association.

We believe that the enclosed may be of interest not only to the Los Angeles County Medical Association, but to the Council of the California Medical Association.

111 Sutter Street. Very truly yours,

HOWARD HASSARD.

It is, therefore, concluded that any county medical society in California, whether incorporated or not, may provide such requirements for admission to membership as it sees fit in its by-laws and in addition, has the power to deny any application for membership, provided that the by-laws are followed, even though such denial of membership may prejudice some outside interest of the applicant.

Respectfully,

HARTLEY F. PEART,
HOWARD HASSARD.

THE LURE OF MEDICAL HISTORY†

PLAGUE EPIDEMICS IN SAN FRANCISCO: HISTORICAL NOTES

By GEORGE H. EVANS, M.D.
Berkeley

PART I*

WHILE the first bacteriologically identified case of plague in a human in San Francisco occurred in 1900—discovered by Dr. W. H. Kellogg, bacteriologist to the San Francisco Board of Health—it is reasonable to assume that sporadic cases had existed for several years. Justification for this assumption is found in a consideration of several factors: (1) While the Bacillus pestis had been known to be the cause of the disease since 1894, at this time the rôle of the rodent and the rat flea (Pulex Cheopis and Pulex Cerataphyllus Fasciatus) as the medium of contact was not known; (2) as a corollary of this, no preventive measures directed against the importation of rodents from plague-infected Oriental ports had been in force in San Francisco harbor; (3) San Francisco's large Oriental population had much traffic with great Oriental ports in countries where plague is endemic.

THE CONTROVERSY OVER THE EXISTENCE OF PLAGUE IN SAN FRANCISCO

The San Francisco Board of Health, with Dr. John M. Williamson as president, and Dr. J. J. Kinyoun, representing the United States Public Health and Marine Hospital Service, immediately affirmed this case and the others subsequently discovered, as bubonic plague. The business interests of the city and its press, however (for reasons which are now difficult to understand), denied the existence of such plague. Plague, in their opinion, was a disease of the Orient, where overcrowding and insanitary conditions, such as did not exist in American ports, were the only causes responsible for its presence. It was unfortunate that "big business" found three complacent physicians, all of them prominent at least in the lay community, who became their authorities and spokesmen.

RÔLE TAKEN BY MEDICAL LEADERS

The group of medical scientists who recognized these cases as a result of their pathologic and bacteriologic examinations suffered from a vilification as vicious as it was unjust. Doctors Williamson, Kellogg, and Kinyoun were the particular recipients of this abuse. The bacteriologist of the State Board of Health found plague bacilli, and lost his position and part of his back salary. Only those old enough to have known Doctor Williamson can appreciate the moral courage and determination with which he faced his responsibility, and stood with determination against the powerful interests and their short-sighted policy of suppression of the truth.

However, while these subversive interests were abusing these scientists and ridiculing their statements, charging that this was merely the efforts of "some meddlesome doctors seeking publicity," and while the Board of Supervisors refused to approve the printing of health reports and vital statistics concerning plague, the plague victims were being autopsied by Doctor Kellogg as they were found, and complete autopsy reports were telegraphed to the *Journal of the American Medical Association*; and thus the facts regarding what was now recognized as an epidemic were circulated among the medical profession throughout the land.

UNITED STATES PRESIDENT MCKINLEY'S MEDICAL COMMISSION

At this time, also, the attention of President McKinley was called to the disputants in this vital subject. He appointed a Medical Commission to investigate and report the facts. This Commission, consisting of Prof. L. F. Barker, then professor of anatomy at the University of Chicago, Prof. Simon Flexner, professor of pathology at the University of Pennsylvania, and Prof. F. G. Novy, professor of bacteriology at the University of Michigan, came to San Francisco late in January, 1901. Refusing to comment on the cultures and pathologic specimens contained in the laboratories of the City Board of Health and the Federal Service, this Commission commenced its investigations in Chinatown, the infected quarter. As a result, six definitely verified cases of plague were found and the report of the Commission was accordingly forwarded to Washington on February 28, 1901, or about a month after its arrival in San Francisco.

EXPERIENCE OF PROFESSOR NOVY'S ASSISTANT

An interesting incident in connection with the activities of this Commission serves to emphasize the facts concerning the existence of plague. Professor Novy had taken back to Ann Arbor a number of cultures procured from the cases found by the Commission in San Francisco for the purpose of manufacturing Haffkine's serum, which, according to Yersin, the discoverer of the plague bacillus in Hong Kong in 1894, possessed prophylactic properties. One of the assistants working in the laboratory with these cultures became infected and shortly presented the symptoms of pneumonic plague, the most deadly form of the infection. He ultimately recovered, following large doses of Yersin's serum, one of the rare examples of recovery from this type of the infection, where the mortality closely approaches 100 per cent.

SAN FRANCISCO AREA INVOLVED IN THE 1900 PLAGUE OUTBREAK

The 1900 epidemic was confined to about twenty blocks of the Oriental Quarter, and claimed, alto-

† A Twenty-Five Years Ago column, made up of excerpts from the official journal of the California Medical Association of twenty-five years ago, is printed in each issue of CALIFORNIA AND WESTERN MEDICINE. The column is one of the regular features of the Miscellany Department, and its page number will be found on the front cover.

* In three parts.

gether, 121 victims, mostly Asiatics, of whom but eight recovered. During much of the time a strict quarantine of the infected quarter was effected by a cordon of police and a rope thrown around the involved area. Following the Federal Commission's report the city, state, and federal authorities carried out a general disinfection of Chinatown. Sporadic cases appeared from time to time, the last one occurring in February, 1904.

It must be remembered that, at this time, the rôle of the rat and the flea in the transmission of plague was unknown. It was not until 1905 that the Indian Plague Commission presented its findings and proved to the world the true method of transmission.

78 The Uplands.

(To be continued)

CLINICAL NOTES AND CASE REPORTS

MILIARY TUBERCULOSIS WITH DEATH AT AGE OF EIGHTEEN DAYS*

By CLARENCE M. HYLAND, M.D.
AND
JAY J. PALMER, M.D.
Los Angeles

DURING the first weeks of life, tuberculosis rarely kills; but there are a sufficient number of deaths to arouse interest of both obstetricians and pediatricians in the manner of the transmission of the infection. A few babies have been born in well-controlled circumstances in which sources of infection other than those present during parturition were definitely absent. In a somewhat larger number of cases environmental conditions make it impossible to rule out postnatal infection; but the character and distribution of the lesions, together with the early termination of life, strongly suggest antenatal infection. In this latter group belongs our case, the record of which follows:

REPORT OF CASE

L. E., a seven and one-half months' premature, white female infant, was admitted to the Children's Hospital, Los Angeles, on July 28, 1935, at the age of sixteen days, with the complaint of irregular breathing over a period of two days.

History.—The infant, a first child, was born at home on July 11, 1935, after an unattended precipitate labor lasting eight hours, lay exposed on the bed for approximately one hour before the umbilical cord was tied. Respiration began immediately without resuscitation. The birth weight was five pounds seven ounces. The placenta was not examined. The mother and child were taken immediately to a maternity cottage, where they remained for ten days. During this time the infant nursed at the breast at three-hour intervals. Although it was losing weight, progress was considered "satisfactory" by the attendant, and the possibility of tuberculosis in either the mother or child was not even suspected. On the tenth day postpartum, the mother was sent to the home of the grandmother. On the twelfth day the infant weighed four pounds, having lost one pound and seven ounces, and supplementary feedings of from one to two ounces of protein milk were started. (Protein milk, two tablespoons in five and one-half ounces of water, with saccharin.) On the fourteenth day postpartum, the mother was "feverish." No cough or expectoration had been noted up to this time. At 6 a. m. on the fifteenth day, the infant began suddenly to breathe irregularly and became cyanotic, cold, and limp. A near-by pediatrician was called. Stimulants were administered and respiration improved somewhat. The condition remained very critical, and twenty-six hours later the infant was brought to the Children's Hospital.

Additional family history elicited later from the mother's attendant revealed the fact that fourteen months previously she had had a "tuberculous abscess" of the chest wall, which had healed after aspiration. Roentgenologic examination of the chest at that time was "negative" for tuberculosis. The course of the pregnancy is said to have been uneventful, the attendant making the categorical statement that "no clinical evidence of tuberculosis was noted." During the year previous to the birth of the infant, a paternal uncle lived with the parents. He had pulmonary tuberculosis with cavitation, for which he had been treated at a Government hospital.

Physical examination was essentially negative except that respirations were irregular and barely perceptible. The temperature was 99.2 degrees Fahrenheit and the weight four pounds five ounces.

Laboratory Examination.—Blood: Hemoglobin, 124 per cent (Sahli Leitz); red blood count, 6,170,000; white blood count, 22,550; differential: lymphocytes, 15 per cent; polymorphonuclears, 82 per cent (majority are "stabs"); monocytes, 1 per cent; leukoblast, 1 per cent. Anisocytosis and one normoblast were noted.

Urine: One to two white cells and red cells were noted in each high-power field; otherwise examination was negative.

The clinical diagnosis was "prematurity."

Hospital Course.—The temperature rose from 99.2 to 105 degrees terminally. In spite of stimulants, the infant remained moribund and died at 12:23 a. m. on July 30, sixty hours after admission.

Autopsy.—Autopsy performed eight hours later revealed a poorly nourished, seven and one-half months' premature, eighteen-days-old Caucasian female infant, weighing 1,862 grams. Inspection of the body revealed nothing of significance. The umbilicus was healed and showed no external evidence of inflammation. The lungs were free in the hemithoraces. The pleural surfaces were smooth and shining, and a small amount of straw-colored fluid was present on each side. The entire surface of each lung showed disseminated, small, firm, rounded, white nodules 0.5 to 1.0 millimeter in diameter. The intervening pulmonary tissue was pink in color, with moderate dependent congestion. The right lung weighed 48 grams. On the cut surface throughout the tissue, small white nodules similar to those on the surface were noted from 3 to 4 millimeters apart. No areas of gross consolidation and no lesion that could be considered to be primary were found. There was no gross caseation or calcification. The pulmonary tissue between the nodules was pink in color and appeared to be air-containing. The bronchioles were moderately prominent, and the mucous membrane of the bronchi was pearly white in color. The hilar lymph nodes were 0.3 to 0.5 centimeter in diameter and were pale pink in color and normal in consistency. The left lung weighed 40 grams, and was similar in appearance and consistency to the right lung. No significant pathological changes were noted in the heart. The liver weighed 82 grams; the surface was dark red in color, smooth and shining, with a moderate amount of fine yellowish mottling; after careful search, three or four minute white nodules were noted beneath the capsule and on the cut surface. The umbilical vein appeared normal. The spleen weighed 4 grams; the tissue was dark red in color and soft in consistency; no definite white nodules were noted, and the lymphoid follicles were barely visible. The kidneys weighed 9 grams each and were essentially normal in appearance. The adrenals weighed 4 grams together and were negative. Examination of the intestinal tract revealed the Peyer's patches and solitary follicles to be moderately prominent. The mesenteric lymph glands were normal in appearance and consistency. The urinary bladder and genitalia were negative. The brain weighed 270 grams and was normal, except for moderate congestion of the meningeal vessels. The left mastoid antrum contained only a small amount of clear fluid, while in the right mastoid antrum there was a moderate amount of white

* From the Department of Pathology, Children's Hospital, Los Angeles.

cloudy purulent material, which on direct smear showed many pus cells and several Gram-positive cocci occurring singly and in short chains; no acid-fast bacilli were found. Culture produced Staphylococcus aureus (hemolytic type). Postmortem roentgenologic examination of the lungs, liver, and spleen failed to disclose any areas of calcification.

Anatomical Diagnosis.—The anatomical diagnosis was as follows: Acute miliary tuberculosis of the lungs; edema and congestion of the lungs; acute right purulent otitis media; cloudy swelling of the heart, liver, and kidneys; congestion of the spleen; hyperplasia of Peyer's patches of the small intestine; hyperplasia of the solitary follicles of the large intestine; and edema and congestion of the brain.

Microscopic Examination.—Microscopic examination of the lungs was reported as follows: Scattered throughout the sections are dark-staining, rounded areas 1 to 2 millimeters in diameter, made up of collections of caseous, large mononuclear cells and round cells in the alveolar lumina. No typical epithelioid cells or giant cells are noted. Several such collections make up a single nodule and in some places these are only separated by alveolar walls, which show little change except congestion of the capillaries. In other nodules the caseation is confluent and only traces of the alveolar wall can be identified. The tissue adjacent to the nodules shows little reaction and tends to be mechanically displaced or compressed. The extent of the caseous process in the nodules varies. Stain for acid-fast microörganisms on the tissue and on smears made from the nodules reveals innumerable acid-fast bacilli, morphologically identical with Mycobacterium tuberculosis, in the caseous areas both intra- and extracellular. There is a tendency to clumping of the organisms. The alveolar spaces between the nodules vary in size and contain a moderate amount of pink-staining material (edema) and an occasional reticulo-endothelial cell. The walls are moderately thickened by congestion of their capillaries. The bronchiolar lumina are for the most part clear, and the walls show no localized inflammatory change. Bronchiolar involvement in the caseous processes is rare."

Microscopic examination of the heart, liver, kidneys, spleen, intestine, adrenals, fallopian tube, uterus, ovary, bone marrow, thymus, and brain failed to disclose any tuberculous lesions. Particular attention was directed toward the liver, as three or four minute nodules had been noted in the tissue grossly. The following was the microscopic diagnosis: Acute miliary tuberculosis of the lungs; edema and congestion of the lungs; congestion and cloudy swelling of the heart, liver, and kidneys; congestion of the spleen; acute catarrhal enteritis; edema and congestion of the brain; and involution of the thymus.

COMMENT

Following the autopsy of the infant, the mother was advised to have an examination by a physician for the presence of tuberculosis. This was done, and on August 7, 1935, the clinical diagnosis of acute miliary tuberculosis was made. The diagnosis was confirmed on August 21, 1935, by roentgenologic examination of the chest. The family was advised that the prognosis was poor, and they called in a faith healer. On September 21, 1935, the onset of "stiffness of the neck" was noted. Death came on September 28, 1935, at the age of twenty-four years. Permission to do an autopsy was not obtained.

Unfortunately, the diagnosis of tuberculosis in the mother was not made before delivery, and no information regarding the placenta is available. The infant had intimate contact with the mother except during the last three days of its life. In addition, there was a probable contact with the paternal uncle, who had known pulmonary tuberculosis with cavitation. Consequently, it is not possible to rule out postnatal infection. The presence of uniformly distributed lesions of a relatively constant size throughout both lungs, and the lack of a significant number of lesions in the liver and other organs indicate that the infection was the result of a single massive inoculation with tuberculous material. That the inoculation was fairly recent is indicated by the presence of innumerable tubercle bacilli in lesions from all parts of the lungs, accompanied by a minimum amount of tissue reaction. Even where caseation had occurred, the outlines of the cells previously occupying the area could be identified. The absence of calcification is further evidence of a recent infection.

Massive inoculation might have occurred by way of the umbilical vein or through the air passages. For an hour following delivery the cord was not tied, and there was ample opportunity for the blood of the infant to pass through the umbilical artery into the traumatized placenta. After passing a ruptured tuberculous focus, the blood could return by way of the umbilical vein laden with tubercle bacilli and enter the inferior vena cava through the ductus venosus. With the closure of the foramen ovale at birth, much of the tuberculous material would lodge in the pulmonary capillary bed. A portion of the blood would, however, be expected to traverse the sinusoids of the liver before entering the vena cava.

REPORTS IN THE LITERATURE

The presence of tuberculous material in the umbilical vein was shown by Siegel and Singer.[1] Using the method of Lowenstein,[2] they cultured the umbilical blood of fifteen infants born of tuberculous mothers and found one positive result which was confirmed by culture of the infant's heart blood obtained at autopsy. That tuberculosis of the placenta is not uncommon, where careful search has been made, has been demonstrated by the results of Sitzenfrey,[3] who found tuberculous lesions in six out of twenty-six placentas (26 per cent). Schmorl and Geipel[4] examined twenty placentas and found tuberculous lesions in nine (45 per cent).

Inoculation of the fetus by way of the air passages has been reported by Gandu,[5] and Siegel.[6] Zarfl[7] suggests that the feeble respiratory motions of the fetus in utero may result in aspiration of amniotic fluid. That aspiration of amniotic sac contents is not uncommon has been shown by Farber and Sweet,[8] who studied the lungs of 124 infants that had lived from two hours to five weeks, and demonstrated by histological methods the presence of amniotic sac contents in 83 per cent of the cases. Large amounts of amniotic sac contents were present in 15 per cent of the series. Costa and Falsia[9] obtained specimens of amniotic fluid during the seventh month of pregnancy from twenty-four women with known pulmonary tuberculosis, by means of a spinal-puncture needle in-

1 Siegel, M., and Singer, B.: Amer. J. Dis. Child., 50:636-641 (Sept.), 1935.
2 Lowenstein: Quoted by Siegel and Singer.
3 Sitzenfrey, A.: Die Lehre von der kongenitalen Tuberkulöse mit Berück-sichtigung der Placentartuberkulöse, Berlin, S. Karger, 1909.
4 Schmorl and Geipel: München. Med. Wchnschr., 51:1671, 1904.
5 Gandu, G.: Ann. d'anat., path., 9:891-899 (Nov.), 1932.
6 Siegel, M.: Beitr. z. path. Anat. u. z. allg. Path., 90:503, 1932.
7 Zarfl, M.: Wien. Klin. Wchnschr., 40:1231 (Oct.), 1930.
8 Farber, S., and Sweet, L.: Am. J. Dis. Child., 42:1372-1383 (Dec.), 1931.
9 Costa, N., and Falsia, M.: La Semana Medica, 41:1156 (Oct. 18), 1934.

serted through the abdominal or the vaginal wall into the amniotic sac. Positive results were demonstrated in three cases (12½ per cent) by guinea-pig inoculation. Examination of the placentas after delivery yielded one positive result (4.76 per cent). No tuberculosis was demonstrable, however, in the three children born from the cases with tuberculous amniotic fluid. Whether the inoculation in our case was through the umbilical vein or was due to aspiration of amniotic fluid, is a matter for conjecture.

From the number of acceptable proved cases in the literature, congenital tuberculosis would appear to be relatively rare. Siegel[10] reviewed the literature in 1934 and tabulates thirty-eight cases reported since 1904, the duration of life varying from one stillborn to one aged six months. Additional cases have been reported by Couvelaire,[11] Bettinotti,[12] Voron,[13] Gandu,[5] and Chiari.[14]

Whitman[15] reviewed the literature, in 1922, and found 519 doubtful cases of congenital tuberculosis, ten of which were those showing organisms without lesions. Many additional doubtful cases have been reported since that time. According to Whitman,[15] rigid criteria are necessary to determine which cases are acceptable, the most important being the demonstration of tuberculosis in the mother, rigid isolation of infants from possible contacts, early clinical diagnosis of the disease process, and finally the demonstration of gross or microscopic lesions. Demonstration of tubercle bacilli without lesions is insufficient.

SUMMARY

1. A case of acute miliary tuberculosis of the lungs in a 7½-month premature infant, dying at the age of eighteen days, is presented.

2. Possible sources of infection are discussed.

4614 Sunset Boulevard.

MECKEL'S DIVERTICULUM

REPORT OF CASE: INTUSSUSCEPTION AND GANGRENE

By HAROLD I. HARRIS, M.D.
Los Angeles

EACH year, according to the reports from the larger clinics in the United States, two to three per cent of the patients going to the operating table, or to autopsy, show a Meckel's diverticulum.

A similar percentage shows no evidence of any pathologic condition, while some reports show symptoms involving the diverticulum as high as three and one-half per cent.

According to Ewing, this diverticulum is found in 2.7 per cent of the population. Balfour reports fifteen cases in 10,600 autopsies.

Because of the fact that this condition is relatively rare, we are wont to lose sight of the fact that it is a definite surgical entity, and that we should ever bear it in mind as a point of differential diagnosis.

To my mind, simply to report a case because of its rarity is a waste of time and energy on the part of the author and an imposition upon the reader, unless the case serves in some manner as a means to enhance our ability to recognize or treat a similar case more readily or in a more favorable manner.

TWO PRINCIPLES

It is by reason of this propensity that I wish to make an appeal to the profession for two principles:

The first is, to direct our mind so that it may be diverted from the channel of an appendicitis; in those cases where we operate with that diagnosis, and which do not show sufficient pathology to warrant such a diagnosis; to the possibility of a diverticulitis.

We are too frequently satisfied with the thought that we have erred in our diagnosis. The appendix is removed and a cursory routine examination is made, which usually is not inclusive for a Meckel's diverticulum.

The patient makes an uneventful recovery. Some time later the patient is again taken ill with what seems to be similar to the attack of appendicitis, for which the patient had been operated upon before. At this time the attack is blamed upon adhesions, or a perityphlitis, or an enteritis, or colitis; or if the patient happens to be a female the pelvic organs are accused of being the offenders.

Dr. Albert O. Jackson of Jasper, Alabama, in *Industrial Medicine* of August and September, 1936, No. 9, p. 439, on the subject, "Meckel's Diverticulum," states: "In the cases developing inflammation (of the diverticulum) and gangrene, the symptoms are almost identical with appendicitis, and this mistaken diagnosis is almost always made since, of all the acute conditions of the abdomen, appendicitis is by far the most common."

My second appeal is that we become diverticulum conscious. Every abdomen that we open should include in our routine examination a meticulous inspection of the last three or four feet of the small bowel.

It is seldom that we expect gall-bladder or spleen pathology in making a diagnosis of appendicitis or pelvic inflammatory disease; yet we include these organs in our routine examinations, while a region which is associated with the small bowel, and which has its proximity to the appendix that Meckel's diverticulum has, is overlooked. I feel quite confident in saying that were we to become diverticulum conscious, we would frequently find the cause of many obscure abdominal pains.

That a Meckel's diverticulum may be the seat of malignancy is quite well established. Those cases are rare, and very difficult to diagnose preoperatively. They are often found during an exploratory laparotomy or from symptoms arising from some complications.

COMMENTS ON THE LITERATURE

Dr. W. T. Liccione of Mount Vernon, New York, writing on "Malignant Tumors of Meckel's

10 Siegel, M.: Am. Rev. Tuberc., 29:297, 1934.
11 Couvelaire, A., and Lacomme, M.: Bull. Soc. d'obst. et de gynéc., 21:660 (Nov.), 1932.
12 Bettinotti, S., and Sammartino, R.: La Semana Medica, 40:1434 (April 27), 1933.
13 Voron, Pigeaud, and Pizerra: Bull. Soc. d'obst. et de gynéc., 20:283 (April), 1931.
14 Chiari, H.: Virchows Arch. f. path. Anat., 285:779, 1932.
15 Whitman, R. C., and Green, L. W.: Arch. Int. Med., 29:261, 1932.

Diverticulum," in the *American Journal of Surgery,* October, 1936, p. 101, states that Ewing, Balfour, Hicks, Kadinski, and Crile have all reported malignant tumors of Meckel's diverticulum. I feel that this type of tumor might also be diagnosed preoperatively were we to concentrate on this section of the intestine to a more marked degree.

It is with no uncertain terms that many authors have emphasized and proved the fact that Meckel's diverticulum frequently contains gastric mucosa, which is often associated with peptic ulcer and perforation. These ulcers are subject to spontaneous healing, as are those of the stomach and the duodenum.

Dr. Donnell B. Cobb of Goldsboro, North Carolina, in *Annals of Surgery,* May, 1936, p. 747, reports several cases of peptic ulcer.

How misleading the gastric syndrome can be when one is looking for pathology in the stomach and none can be found! This lesion, too, could be more frequently localized if we were to concentrate more upon frequent examination and inspection of this part of the alimentary tract.

I am wont to confess that there are a number of cases that I recall where I wish I could reopen and examine the last three feet of the ileum. There are a number of these that come to my mind that were diagnosed as ulcers of the stomach, clinically, but which showed no positive x-ray findings, and which did not clear up by diet or medication. The appendix was removed and we prayed for recovery, or at least amelioration of the symptoms, but no such good fortune was evident.

There are numerous cases of obstruction reported, with the usual symptoms of obstruction, and which upon laparotomy showed an involvement of Meckel's diverticulum. Dr. A. C. Jackson states in his thesis: "Those cases that develop intestinal obstruction have the classical symptoms of this condition, and are unlike intussusception in that there is no palpable tumor and there is no mucus and blood in the stools showing up after the other symptoms are in evidence."

REPORT OF CASE

The case I am about to report was diagnosed as acute appendicitis. The patient, a white boy, American; age, fifteen.

History.—Two days previous to entering the hospital, the boy went to the Y. M. C. A. to swim. He went home, ate lunch, and then went out to play. About the middle of the afternoon he became ill. He complained of pain (generalized over the abdomen), vomiting, no temperature, no rigidity. The vomiting stopped, but the pain continued, and by the second day had localized in the right quadrant low down, and did not change its location.

Examination.—After the second day he was finally brought to the hospital, at which time I saw him. Physical examination revealed a young male, white, about fifteen years of age, his countenance in a state of pain, and complaining of pain in the right lower quadrant.

The entire physical examination was negative, except the rigidity and tenderness in the right side. Pulse rate was 120. Blood pressure: systolic, 120; diastolic, 80. Respiration, 32. Temperature, 98.

Urine showed a faint trace of albumin, positive for acetone and no acetic acid. Microscopic examination revealed a few pus cells and a few epithelial cells.

White cell count showed 7,200 leukocytes, 74 per cent polynuclears, 18 per cent lymphocytes, and 7 per cent large mononuclears.

Examination by systems showed no abnormal findings.

Surgical Procedure.—A mid-right rectus incision was made about three inches in length and about two-thirds of the incision below and one-third above the umbilicus, through the skin and superficial fascia. Hemostasis was applied. The anterior sheath of the rectus was opened, and the rectus muscle was displaced medially. Skin towels were applied. The posterior sheath of the rectus and the peritoneum were opened together. A considerable amount of serosanguinous fluid was evacuated. The cecum was located and delivered. The appendix appeared normal, but covered with a Jackson's membrane.

Jackson's membrane was cut and the appendix released. The appendix was untwisted and the meso-appendix clamped, cut, and ligated. The base of the appendix was doubly clamped and the base then tied; Pachenstacker suture inserted, appendix severed, stump treated with phenol and alcohol. Stump was turned in and Pachenstaker tied and cut.

A search was then made to determine the cause of the fluid and symptomatology.

All the organs were examined and appeared quite normal. The cecum was reëxamined, but it was soft and not distended. A closer examination of the ileocecal junction showed the normal continuity missing, and lack of mesentery in the region of this portion of the ileum; also this section of the ileum appeared to be twisted upon itself.

An attempt was then made to extricate the ileum from the cecum, but this could not readily be done, so an examination of the ascending colon was then made. A mass was located in the hepatic flexure and extending into the transverse colon.

The mass was expressed from above down, according to the Hudson maneuver. After about two feet of the ileum had been expressed, the normal ileocecal junction was then noted. But about 18 inches from the ileocecal junction there was a depression in the wall of the ileum, with a corresponding mass on the inside. Upon further manipulation, part of the mass was expressed, which showed a gangrenous intussusception Meckel's diverticulum, about two centimeters in diameter. A large area of the ileum was very dark in color and eroded in different areas. After a considerable length of time, using a hot towel, the majority of the intestine resumed a nearly normal color, with the exception of a few areas of ecchimosis into the substance of the intestine. The area about the diverticulum was examined, and the diverticulum was amputated, but in closing this particular area, due to the fact that the ileum was slightly narrower than normal at this junction, there was hesitancy about leaving the intestine in this condition for fear of a secondary obstruction. This area, about three inches in length, was then resected, the stumps of the resected area were closed over, clamped, and secondary Lambert sutures used to cover the primary sutures, the angles being reinforced with several interrupted sutures. A peristaltic lateral anastomosis was made of the two sections, using clamps and anastomosing about six centimeters of the intestine, leaving about one and one-half centimeter in each end. The posterior seromuscular suture was a continuous suture of No. 0 chronic catgut, intestinal suture. This was inserted after the traction sutures on each end were placed. The serosa was then opened about one-quarter centimeter from this suture and reflected. The mucous membrane of the intestine was next opened, and a posterior Robert suture, uniting all layers of the small intestine, continuing on back to the original starting point. At this point the clamps were released, and the sutures brought anteriorly with a Mikulicz suture until reaching the anterior portion toward the terminal closure and at this point reverted to an ordinary Furrier's suture. The posterior seromuscular suture was then continued on the anterior wall, and the Lambert suture was used as a third line of closure. The angles were reinforced and the traction suture removed. The clamps were removed, as was the towel between the segments underneath. Clean towels and gloves were used at this stage. The abdomen was then closed in layers. Two Penrose drains were inserted, one into the pelvis and one into the trough of the ascending colon. The peritoneum was closed with No. 2 plain catgut sutures in four stages, using continuous sutures at this point. The fascia was closed by interrupted catgut sutures, three tension sutures,

a figure-of-eight was applied, and skin clips were used to close the skin.

The boy was returned to bed in poor condition.

Intravenous medication, Murphy drip, and cardiac stimulants were given. The following day his temperature went to 102 degrees, pulse 152, respiration 32. The patient was restless, moaning, and the pulse was irregular. Next day the pulse continued high, and the patient was restless. Intravenous medication was continued. The patient was irrational. The dressings were saturated with serosanguineous material.

The afternoon of the second day found the boy irrational. The pulse was 150, and the temperature went to 104 degrees; it dropped slightly that night, but the following day the temperature went to 105 degrees, then dropped to 103 degrees, again rose to 104½ degrees, and on the fourth day it dropped to 100 degrees. For about a week following this, his temperature ranged from 101 degrees to normal, and finally found the normal range until his recovery.

The first ten days were very stormy, but following this he rapidly regained in strength.

In the past year the boy has grown more vigorously; his general health has much improved. He has gained considerably in weight, and his gastro-intestinal tract has been functioning normally.

IN CONCLUSION

1. In making a diagnosis of appendicitis we should always attempt to eliminate diverticulitis.

2. In every acute abdominal condition diverticulitis should be included in differential diagnosis.

3. We should become Meckel's diverticulum conscious, and include its examination in all laparotomies.

6253 Hollywood Boulevard.

SCLERODERMA AND SCLERODACTYLIA: THEIR TREATMENT WITH FERMENTS AND TISSUE EXTRACTS*

By SAUL S. ROBINSON, M. D.
Los Angeles

DURING the past few years important investigations by Joseph Sellei, [1, 2, 3, 4] of Budapest, have tended to show that scleroderma and sclerodactylia are two different disorders. Clinical, pathologic, and therapeutic studies have been performed to make this distinction. The difference in the response of scleroderma and sclerodactylia, respectively, to ferment and tissue extract therapy have been of especial value in the differentiation.

SIGNS AND SYMPTOMS

Scleroderma verum includes the diffuse, circumscribed, linear and morphoea forms of the disorder. Clinically, scleroderma is associated with little or no subjective symptoms, and trophic lesions are absent in the lesions. All types of true scleroderma show pathologic changes in the cutis and subcutaneous connective tissues, and respond favorably to treatment with ferments derived from the stomach, the duodenum, and the pancreas. These ferments must usually be given over long periods of time, and result in the indurated scleroderma plaques becoming softened and slowly resorbed. Functional disturbances of the pancreas can be found in scleroderma from the positive reaction in the atoxyl lipase resistance test. This test is negative in sclerodactylia. The etiology of scleroderma is, therefore, considered to be a ferment disturbance of the pancreas and the skin.

Sclerodactylia, or acrosclerosis, as Sellei prefers to name the disorder, is characterized by the primary symmetrical involvement of the hands, the feet and the face. Vasomotor changes are found especially in the hands and feet, and consist of local syncope and local asphyxia associated with pain in cold weather. Trophic disturbances manifested by tissue shrinkage and ulcerations occurring at the finger tips are also found. The tissue shrinkage and skin contraction on the face produce a mask-like appearance. When scleroderma verum involves the hands, it spreads from the arm and forearms to the back of the hand and the fingers, and does not primarily involve the hands and the fingers as in sclerodactylia. Telangiectasia and involvement of the heart and the aorta are also frequently associated with sclerodactylia, and are absent in true scleroderma. Sclerodactylia responds to the vasodilators found in tissue extracts, and the muscle and skin extracts have especially been used with great benefit. Ferment therapy does not influence sclerodactylia objectively, although subjective improvement is reported.

ETIOLOGY

The etiology of sclerodactylia is considered to be an angiotrophoneurosis, due to disease of the sympathetic nervous system. It is believed that the direct cause of sclerodactylia is a "chemical substance" or endocrine gland disturbance involving the thyroid, parathyroid and suprarenal glands.

THERAPY

The ferment therapy of scleroderma: Fresh pancreatic ferments such as amylase, lipase, and trypsin, are given one hour before each meal in tablet form. The dosage is three tablets before breakfast, two tablets before luncheon, and two tablets before dinner. The total daily pancreatic tablet dosage is thus seven tablets. Instead of tablets, raw pancreas may be given in the dosage of one hundred to two hundred grams daily. Sellei recommends that the raw pancreas be served at breakfast in warm boullion or mixed with potato puree. The pancreas ferment therapy can be supplemented by gastric and duodenal ferment tablets, taken in the dosage of two tablets twice daily. Liver-extract tablets and injections may also be given with the above therapy. Months to years of continuous treatment with ferments are necessary for beneficial results in scleroderma.

The tissue extract therapy of sclerodactylia: Vasodilators, such as acetylcholin, padutin, and muscle and skin extracts are given for a period of three to six months. Sharpe and Dohme tissue extract No. 568, given in the initial dosage of one cubic centimeter subcutaneously, and followed by three cubic centimeters twice a week, has proved to be of great value in the treatment of my cases of sclerodactylia.

1930 Wilshire Boulevard.

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* From the Department of Dermatology, Cedars of Lebanon Hospital, Los Angeles.

1 Sellei, J.: Arch. f. Dermat. u. Syph., July, 1932.
2 Sellei, J.: Dermat. Ztschr., June 2, 1931.
3 Sellei, J.: München Med. Wchnschr., Oct. 7, 1932.
4 Sellei, J.: Brit. Journ. Dermat. and Syph., 46:523, 1934.

BEDSIDE MEDICINE FOR BEDSIDE DOCTORS

An Open Forum for brief discussions of the workaday problems of the bedside doctor. Suggestions of subjects for discussions invited.

CANCER OF THE SKIN

I. PATHOLOGY

WILLIAM E. COSTOLOW, M. D. (1407 South Hope Street, Los Angeles).—Cancer of the skin may be divided, from a practical standpoint, into two large pathological groups—the keratinizing and the nonkeratinizing epitheliomas.

The keratinizing epitheliomas are the squamous-cell carcinomas. They are characterized by the presence of adult squamous cells, hornification and pearl formation. Clinically, these lesions occur in two different types: the proliferative or papillomatous type, and the ulcerative or infiltrating type. The latter is the more dangerous. The squamous-cell carcinomas metastasize widely and rapidly, depending upon the degree of malignancy as determined by the proportion of young anaplastic cells present. The low grade or adult type of squamous-cell carcinoma, with pearl formation and marked keratinization, would theoretically be classed as radioresistant. However, as the growths are on the surface, the radioresistance is not of great clinical importance, as doses large enough to destroy the growth can be administered. The more anaplastic types, composed almost entirely of young, actively growing cells, are very radiosensitive and may disappear after treatment with comparatively small radiation dosage. The clinical course of the squamous-cell type is more rapid than the nonkeratinizing. A small high-grade primary squamous lesion may present extensive distant metastasis.

The keratinizing tumors usually appear below the angle of the mouth, trunk and the extremities, but may appear at any place on the body.

The nonkeratinizing group comprises several types arising from the various appendages of the skin, as sweat glands, sebaceous glands, hair matrix, and the typical basal-cell type which develops from the basal cells of the Malpighian layer of the skin.

The basal cell or rodent ulcer type is of quite common occurrence. Frequently this lesion appears in elderly individuals, located on the face, neck, scalp, and around the eyes or ears. The growth is slow and has often been present for a number of years before aid is sought. Occasionally, edges will heal spontaneously. Early lesions are often covered by a crust with a granular appearing, bleeding surface underneath. The more advanced lesions may show depressed, ulcerated centers with elevated, pearly edges. In advanced stages the basal-cell growths infiltrate the underlying tissues irregularly, leaving isolated islands of cells irregularly placed with respect to the overlying original lesions. (It is this fact which often causes failure in treatment, the surface lesion being superficially destroyed by surgery or irradiation, and the deeper islands allowed to remain.)

In advanced stages these lesions, although they do not metastasize, infiltrate extensively, causing destruction of muscle, cartilage, and bone.

It has been an often-repeated theme, handed down in dermatological and cancer literature, that basal-cell growths are more amenable to treatment by either surgery or radiation than the squamous-cell type. As the basal-cell growths do not metastasize, there is some justification for this belief; but as basal-cell growths, due to their infiltrating nature, are so prone to recur locally if superficially treated, our viewpoint indicates that all of these lesions should be treated in the same manner—adequately and thoroughly, regardless of what method of treatment is used.

The adenoid cystic type of carcinomas, arising from the skin appendages, are mixtures of both squamous and basal-cell elements. The clinical course of these lesions depends largely upon whether the predominating type of cell is basal or squamous. Microscopical differentiation is the only positive method for accurate diagnosis of these lesions—this is equally true in relation to all other types of skin cancer.

The melano-epithelioma group of skin cancer is a type which occurs less frequently; it is the most dreaded, due to the almost certain fatal termination. Present-day opinion agrees with Masson's conclusion, that these growths arise from neural end-organs in the skin. Both pigmented and nonpigmented growths appear in both round and spindle-cell formation, and are very malignant, usually occurring on the skin, but occasionally in the eye or other structures. They are notoriously resistant to radiation, which would tend to confirm their neurogenic origin, as we know that all nerve tissue is very radioresistant.

A shiny, black, smooth nevus is the usual site of origin of these growths—enlargement and growth of these moles ofttimes appearing after a single trauma or after repeated irritation. At times the growth remains localized, gradually infiltrating and extending in the lymphatics, and then breaking into the blood stream with widespread metastasis to all organs. In other instances, a primary lesion, so small as to be overlooked except by most careful examination, may immediately enter the blood stream and produce extensive metastasis.

* * *

II. PROGNOSIS

H. J. ULLMANN, M. D. (1520 Chapala Street, Santa Barbara).—As practically all cancers have a curable stage, and cancer of the skin becomes visible and possible of diagnosis well within this stage, the prognosis should be excellent. Unfortunately there are several factors present today that prevent the optimum 100 per cent cures. One is

the ignorance of the patient, who thinks because the warty growth or ulcer is painless and apparently has shown a repeated tendency to heal, delays seeking advice until regional glands are involved or bone invaded. The second is the ignorance of the physician who first sees the lesion and advises neglectful waiting because he does not recognize its potential malignancy, or tries "healing salves" or the even worse superficial cauterization with the desiccating spark or silver nitrate until the increased rapidity of growth caused by these ministrations places it beyond control. The third, also due to the ignorance of the physician, is inadequate or improper treatment of the lesion at any stage.

The percentage of cures is increasing and will increase as the public, and I regret to say especially the profession, become familiar with the seriousness of what they now look upon as a minor wart or superficial ulceration, and the prime necessity for proper adequate prompt treatment.

There is no excuse for less than a perfect prognosis in the common basal or squamous-cell epitheliomas of the skin when properly and adequately treated by either surgery or radiation in a reasonably early stage. This applies to lesions on the ears and eyelids as well.

The malignant melanoma, the cancer arising in a nevoid or pigmented mole, has a somewhat different prognosis. Here the prognosis depends entirely upon whether the primary lesion has been removed completely by wide surgical excision before metastasis has occurred or not. If metastasis has occurred, the prognosis is hopeless, as death will follow general visceral involvement within a few months to a year—rarely longer. If metastasis has not occurred the patient is cured. Inadequate removal, sparking or superficial cauterization is useless, and always is followed sooner or later by general metastasis.

What has been said concerning these commoner forms applies equally well to the rarer. But it must be understood that the entire discussion is confined to cancer that is primary in and of the skin and its appendages, and does not apply to metastatic lesions primary in other organs or tissues.

To recapitulate: cancer, primary in the skin, when treated in a reasonably early stage by adequate proper methods, either surgical or radiological, offers almost a perfect prognosis. The failures are partly due to ignorance or neglect on the part of the patient. Unfortunately, a high percentage of failures is due to frank ignorance or neglect on the part of the profession, and in the light of our present knowledge is inexcusable.

* * *

III. TREATMENT

LAURENCE TAUSSIG, M.D. (384 Post Street, San Francisco).—In the treatment of cancer of the skin certain factors are of paramount importance. The first and most essential consideration is the complete destruction of all abnormal cells. Partial or incomplete removal may increase the grade of malignancy of the neoplasm, either hastening its local spread or speeding its dissemination to other portions of the body. If incomplete removal has no other bad effect, it delays the cure, necessarily increasing the amount of scarring. The second point is the production of the least possible amount of scarring consistent with complete removal. Third, the most economical and rapid method of treatment should be utilized. Fourth, the method of treatment chosen should be one with which the operator is proficient.

There are two kinds of skin cancer. The basal-cell epithelioma is slow growing, does not metastasize, and responds more readily to various types of therapy than does the squamous-cell epithelioma. The latter grows more rapidly, and is apt to metastasize to the local lymph nodes. It is generally possible to differentiate between these types clinically, but at times even the expert dermatologist errs in making this differential diagnosis. It is, therefore, evident that treatment should be capable of curing the more malignant type of growth.

Many methods of treatment have been proposed for these lesions, and most of them, correctly used, produce a high percentage of cures, provided the lesions are first seen at a relatively early period in their development. Surgical excision, radiation therapy, thermic or chemical destruction, and various combinations of these procedures have proved effective. Each of the mentioned methods is the treatment of choice in special instances.

For the great majority of these cases I prefer the use of the curette followed by electrodesiccation. This consists in anesthetizing the lesion by infiltrating the surrounding skin with two per cent procain, then removing as much of the tumor as possible with a small, sharp curette. Following this the area is treated by electrodesiccation. A dry eschar is formed which separates in about two weeks, and complete healing is accomplished in six weeks. The advantages of this method are: (1) Its simplicity and cheapness. (2) The fact that the extent of the growth can be determined more accurately by the curette than by any other means. (3) Sufficient material is usually available for microscopic examination. (4) It is equally applicable to basal cell and squamous-cell epitheliomas. The chief disadvantage is that the scar is apt to be somewhat more prominent than that which occurs following radiation therapy, but this scar improves with time, while the radiation scar is apt to develop increasing atrophy, telangiectasia, keratoses, and even radiation cancer in the course of a number of years. The advantage over surgical excision consists in the fact that the least possible damage is done to surrounding normal tissue. In the case of an aged patient with a rather extensive growth, radiation therapy is likely to be the method of choice because its disadvantages are in this instance far outweighed by its advantages. In some instances the location of the lesion may incline our choice toward radiation treatment. This is especially true of basal-cell lesions located on the borders of the lids. These are often radiosensitive and any other destructive method may result in a particularly bad cosmetic result. It must be remembered that once a given area of skin has been radiated, a certain amount of permanent damage has been done which does not disappear with the immediate radiation re-

action. In the treatment of malignant new growths by radiation the total dosage is necessarily close to the highest possible toleration dose for the normal tissue. Further radiation at any later time may give rise to extensive destruction. Therefore, any subsequent radiation should be undertaken only by one who is expert in its use and who is able to obtain the complete details of previous treatment. In certain instances of extensive epithelioma which has been ineffectively treated, surgery of the most radical type may be indicated in order to pave the way for future or even immediate plastic work. Squamous-cell epithelioma metastasizes to local lymph nodes sooner or later. The only satisfactory treatment for metastases of this type is surgical removal of the nodes, perhaps followed by radiation of the area. Radiation alone rarely results in more than palliation. In general, radiation following surgical or thermic destruction of skin lesions does not increase the percentage of cures. Radiation of lymph areas that may become secondarily involved does not appear to prevent metastases.

Deaths Following Elixir of Sulfanilamide—Massengill: VIII.—About a year has passed since *The Journal* first announced the deaths which followed the administration of Elixir of Sulfanilamide, prepared and sold by the S. E. Massengill Company of Bristol, Tennessee. Preliminary tests at that time showed the poisonous fluid to consist essentially of 40 grains of sulfanilamide to the fluidounce of a menstruum containing approximately 72 per cent of diethylene glycol by volume, with flavoring. Week by week the number of deaths increased, eventually to more than seventy-five. Within two weeks after the first editorial was published, the American Medical Association Chemical Laboratory had confirmed the preliminary tests and reports were published under its auspices, showing that the toxic ingredient was diethylene glycol. Maps were also published indicating the area in which the detail men of the Massengill Company had promoted the elixir to members of the medical profession. Recently an extensive report in *The Journal* by Geiling and Cannon detailed the results of extensive studies of pharmacologic and pathologic effects following the ingestion of diethylene glycol or the Elixir of Sulfanilamide—Massengill. During the first few weeks of the tragedy the United States Food and Drug Administration traced all shipments and removed them from the market. Federal inspectors also traced deaths reported in local communities. There was close coöperation between the Government agencies and the headquarters of the American Medical Association. The publicity issued by *The Journal* warned the public; otherwise the number of deaths might have been higher. Had the medical profession followed the Council on Pharmacy and Chemistry, these tragedies would not have occurred: first, because the Council had consistently refused to accept, and to this day has not accepted, any liquid preparation of sulfanilamide, as there has been no evidence of usefulness and stability; second, because no product of the S. E. Massengill Company ever stood accepted for inclusion in New and Nonofficial Remedies. Had all physicians "followed the Council" or had the manufacturer followed the reasonable procedure of investigating the product before putting it on the market, nearly a hundred lives might have been saved. It will be recalled that the Secretary of Agriculture stated that the elixir had been prepared without any testing whatever other than that for flavor; that the total shipments amounted to 633. The number of deaths reported by Government investigators as due to the "elixir" totaled close to a hundred.

The only basis of action under the Food and Drug Act, as pointed out by Secretary Wallace, was the allegation that the word "elixir" implied an alcoholic solution, whereas the product was a diethylene glycol solution—notwithstanding the fact that there was evidence of danger from internal administration of diethylene glycol, prior to the marketing of Elixir of Sulfanilamide—Massengill.

To all such tragedies there is an aftermath. The unwarranted carelessness on the part of a pharmaceutic house awakened Congress and officials of the Government to the necessity of taking action to protect the public. Congress passed a bill providing that no new drug or any modifications of old drugs may be placed on the market until the entire formula has been submitted to the Food and Drug Administration of the United States Department of Agriculture and the firm licensed to market the drug. Congress further enacted the long overdue Food and Drug Act, with somewhat awkward enforcement provisions. The Food and Drug Administration retains supervision over the product itself and over the labels and circulars accompanying the trade package. Claims made by other means, such as the radio, the spoken word, circular or newspaper advertising or even advertisements in medical periodicals (under certain definitions), are under the supervision of the Federal Trade Commission.

The Department of Justice, with the Food and Drug Administration, instituted legal proceedings against Samuel Evans Massengill, owner of the Massengill Company. A federal court at Greenville, Tennessee, upheld the contention of the Government that there was adulteration and misbranding. One hundred and sixty-six counts were filed against the concern, fifty-six charging that the drug was adulterated when it was shipped in that its purity fell below the professed standard under which it was sold and fifty-six charging that the drug was misbranded in that the name "Elixir of Sulfanilamide" was false and misleading. The remaining fifty-four counts charged that the drug was misbranded in that the statement "Quality Pharmaceuticals" appearing on the stickers attached to the corks of the bottles was false and misleading. The defendant, by his counsel, filed a demurrer to the charges. Following oral arguments and filing of briefs, the court ruled with the defendant with respect to the fifty-four misbranded counts involving the statement of "Quality Pharmaceuticals," but decided that the 112 counts alleging adulteration and misbranding in connection with the statement "Elixir of Sulfanilamide" did set up violations of the Food and Drug Act. On October 3 the defendant's counsel pleaded guilty to the 112 counts of information and thereupon was sentenced to pay a fine of $150 on each count, making a total of $16,800. In addition there are still pending against Samuel Evans Massengill sixty-two counts to be brought before the district court of Kansas City, covering shipments of Elixir of Sulfanilamide made from the Kansas City plant of the company. Even if it might be assumed that the latter court will impose a similar fine for these counts, the total would be $26,100. The Food and Drug Administration merits commendation for its vigorous pursuit of the Massengill episode.

In the attempt to secure justice for the public in this case, federal officials were miserably handicapped by the weak law in existence at the time of the offense. A similar incident would not be dealt with so lightly under the new laws. Of course if the word "elixir" had not been used, it is unlikely that any member of the medical profession would have prescribed the product, since "elixirs" are widely used and the solvents are not presumed to contain active or poisonous ingredients. Sulfanilamide itself has been recognized as an extremely valuable drug in restricted conditions. Physicians who used the elixir failed to realize that it is far safer to limit prescriptions of nonofficial articles to those brands accepted by the Council on Pharmacy and Chemistry and to use them as described in New and Nonofficial Remedies. It is always hazardous to prescribe unstandardized and uncontrolled remedies, or drugs sold under catchy names. Any pharmaceutic house which desires to market its products honestly and in accordance with the rules of the Council may have its products considered.—*Journal of the American Medical Association,* October 22, 1938.

CALIFORNIA MEDICAL ASSOCIATION

This department contains official notices, reports of county society proceedings and other information having to do with the State Association and its component county societies. The copy for the department is submitted by the State Association Secretary, to whom communications for this department should be sent. Rosters of State Association officers and committees and of component county societies and affiliated organizations, are printed in the front advertising section on pages 2, 4 and 6.

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1. *Council Minutes, Two Hundred and Sixty-Fifth Meeting, May 12, 1938.*
2. *Council Minutes, Two Hundred and Sixty-Sixth Meeting, June 11, 1938.*
3. *Council Meeting, Two Hundred and Sixty-Seventh Meeting, October 1, 1938.*

DEPARTMENT OF PUBLIC RELATIONS

1. *Neon Signs as a Means of Advertising.*
2. *Coöperation Rendered by a County Auxiliary in Work Against "State Humane Pound Act."*

COUNCIL MINUTES*

Minutes of the Two Hundred and Sixty-Fifth Meeting of the Council of the California Medical Association

Held in Room 449 of the Hotel Huntington, Pasadena, California, May 12, 1938, at 9 a. m.

1. **Call to Order.**—The meeting was called to order by Acting Chairman Morton R. Gibbons, with the following members present: Past President Howard Morrow; President William W. Roblee; President-Elect Charles A. Dukes; Speaker Lowell S. Goin; Councilors Calvert L. Emmons, Carl R. Howson, Louis A. Packard, Axcel E. Anderson, Alfred L. Phillips, Oliver D. Hamlin, P. K. Gilman, F. N. Scatena, Henry S. Rogers, Junius B. Harris, C. O. Tanner, William H. Kiger, Harry H. Wilson, Chairman of Public Relations Committee George G. Reinle; Editor George H. Kress, Secretary F. C. Warnshuis; General Counsel Hartley F. Peart and his associate, Mr. Howard Hassard.

Absent: Doctors Kelly and Schaupp.

A quorum present and acting.

2. **Membership of Council.**—Acting Chairman Gibbons announced that George G. Reinle was now a member of the Council by virtue of his election as chairman of the Committee on Public Relations; and P. K. Gilman was the new councilor-at-large from San Francisco.

3. **Election of Chairman of Council.**—On nomination of William Roblee, seconded by Howard Morrow, Karl L. Schaupp was elected chairman of the Council for the ensuing year.

4. **Election of Vice-Chairman.**—On nomination of William Roblee, seconded by Frederick N. Scatena, Junius B. Harris was elected Vice-Chairman of the Council.

Doctor Harris then took the chair.

The Council expressed its appreciation of the services rendered by Doctors Pallette and Gibbons, who then retired.

5. **Executive Session.**—It was moved by Charles Dukes, seconded by Louis Packard, that the Council go into executive session. Carried.

Doctor Warnshuis, Doctor Kress, Mrs. Talbot, Mr. Peart, and Mr. Hassard then left the room.

Dr. Louis Packard was appointed acting secretary.

Announcement was made by Vice-Chairman Harris that the election of a secretary-treasurer and a director of public relations for the ensuing year was the next order of business.

An informal discussion was had of this situation in which all members of the Council (except the newly elected councilors, Doctors Reinle and Gilman) took part. Each member of the Council, with said two exceptions, expressed the opinion that the best interests of the Association would be served and economies effected by the election of a successor to Dr. F. C. Warnshuis, whose term had expired.

Secretary Warnshuis was called in and informed that the Council was of the opinion that a successor to him should be elected and was asked if he desired to make a statement.

The Secretary inquired if there were any charges or specific complaints. None were advanced.

The Secretary then reviewed the circumstances, verbal and written conditions and correspondence, and long distance telephone conversations, under which he was invited to come to California to assume the duties of secretary-treasurer and director of public relations. Citation was made of the understanding agreed upon by the Council at the Council meeting in Yosemite in 1935.

The Secretary then reviewed his activities and directed attention to the approved reports and financial statements that reveal the expanding activity of the Association during his tenure of office and his administrative work . . .

. . . On motion duly made, seconded and unanimously carried by the vote of all the councilors present, excepting the newly elected members, Doctors Reinle and Gilman (who were excused from voting because of their unfamiliarity with the situation), the following resolution was adopted:

WHEREAS, It is to the best interests of this Association and economies can be effected by making a change in the office of Secretary-Treasurer and Director of Public Relations; now, therefore, be it

***Resolved,* That Dr. Frederick C. Warnshuis be appointed to act temporarily as Secretary-Treasurer and Director of Public Relations, to serve from the date hereof up to July 1, 1938, at his present total salary of $1,000 per month, and that on June 30, 1938, he be paid a bonus of three months' salary, to wit: the sum of $3,000, subject to his acceptance of such temporary arrangement; and be it further**

***Resolved,* That the chairman of the Council be and he is hereby authorized and instructed to appoint a committee of three members of the Council to examine the facts and available documents relating to the original employment of Doctor Warnshuis; to attempt to effect a mutually agreeable settlement of any difference between the Association and Doctor Warnshuis, and report thereon to the Council; and be it further**

***Resolved,* That President W. W. Roblee be and he is hereby appointed, and authorized and directed as a committee of one formally to notify Doctor Warnshuis forthwith of the foregoing action of the Council.**

. . . On motion duly made, seconded and unanimously carried (Doctor Gilman not voting), Dr. George H. Kress was elected secretary-treasurer and director of public rela-

* The minutes of the two hundred and sixty-fourth meeting of the Council of the California Medical Association were printed in the July, 1938, issue of CALIFORNIA AND WESTERN MEDICINE, page 84.

tions at a salary of $8,000 a year, to take office on July 1, 1938, for the term commencing July 1, 1938, and ending at the next organization meeting of the Council succeeding the next annual session of the Association.

On motion duly made, seconded and unanimously carried (Doctor Gilman not voting), Dr. George H. Kress was elected editor for the ensuing year at a salary of $4,000 per year.

On motion duly made, seconded and unanimously carried, Hartley F. Peart, Esq., was appointed general counsel for the Association for the ensuing year at his present retainer, to wit, $4,000 per year.

On motion duly made, seconded and unanimously carried, Hubert T. Morrow, Esq., was appointed associate general counsel for the ensuing year, without retainer. . . .

6. **Farm Bureau Conference.**—Doctor Rogers reported on his County Hospital Conference Committee and requested that Doctors Gibbons and Wilson be added to the Committee. Said doctors were added to said committee.

The Secretary was directed to arrange a conference in San Francisco on May 28 between the Council's Special Committee and Farm Bureau representatives. Mr. Peart was recalled and his opinion obtained regarding this conference.

7. **Legal Stenographer.**—It was moved by Charles Dukes, duly seconded and carried, that Mr. Peart be allowed $75 per month for secretarial service.

8. **Council Meeting.**—The Secretary was directed to arrange for a Council meeting in June, time and place to be fixed by the Chairman.

9. **Adjournment.**—The Council adjourned at 1 p. m.

JUNIUS B. HARRIS, *Acting Chairman.*
LOUIS A. PACKARD, *Acting Secretary.*

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Minutes of the Two Hundred and Sixty-Sixth Meeting of the Council of the California Medical Association

A special meeting of the Council of the California Medical Association was held in the offices of the Association, Room 2004, 450 Sutter Street, San Francisco, Saturday, June 11, 1938, at 9:30 a. m.

1. **Roll Call.**—The Secretary called the roll of the Council and the following members answered as being present: William W. Roblee, Lowell S. Goin, Karl L. Schaupp, T. Henshaw Kelly, Calvert L. Emmons, Louis A. Packard, A. E. Anderson, A. L. Phillips, F. N. Scatena, Henry S. Rogers, H. H. Wilson, William H. Kiger, C. O. Tanner, P. K. Gilman, J. B. Harris, George G. Reinle, George H. Kress, F. C. Warnshuis; Mr. Hartley F. Peart, general counsel, and his associate, Mr. Hassard.

Absent: Doctors Dukes, Howson, Morrow, and Hamlin.

2. **Executive Session.**—The chairman, Karl L. Schaupp, announced that at the request of William W. Roblee, the Council would go into executive session. Doctors George H. Kress and Frederick C. Warnshuis and Mr. Peart and Mr. Hassard then left the room.

3. **Call to Order.**—Karl L. Schaupp, Chairman of the Council, acted as chairman of the meeting, and Mrs. Armida Talbot, assistant to the secretary, acted as secretary thereof.

4. **Office of Secretary-Treasurer and Director of Public Relations Department.**—Chairman Schaupp stated that as Doctor Warnshuis left the room he had handed him, as presiding officer, the opinion of Roy A. Bronson, Esq., of the law offices of Bronson, Bronson & McKinnon, on the failure to reëlect Doctor Warnshuis as secretary-treasurer and director of public relations.

Doctor Schaupp then read the opinion of Messrs. Bronson, Bronson & McKinnon, which was then ordered placed on file. . . .

Doctor Roblee presented the report of the Committee appointed to confer with Doctor Warnshuis. At the conclusion of the presentation of the report, Doctor Roblee and Doctor Schaupp submitted to the Council various county society resolutions and letters together with communications from individuals and groups, all expressing opinions on the Council's action in regard to the offices of the secretary-treasurer and director of public relations. Said resolutions and communications were ordered filed.

Upon motion duly made, seconded and carried, the report of the Special Committee was accepted.

Consideration and discussion was then had concerning the resolution and communications previously submitted and filed. (Said resolution and communications consisted of protests and approvals of the Council's action.)

5. **Noon Recess.**—At this point the Council recessed for luncheon.

6. **Reconvening of the Council.**—The Council reconvened after luncheon, with all members present who had attended the morning session. The Chairman announced that the Council would immediately go into executive session.

7. **Minutes of Meeting of May 12, 1938.**—A draft of the minutes of the organization meeting of the Council held at Pasadena, May 12, 1938, was read. Several corrections were ordered in said draft.

8. **Secretary-Treasurer and Director of Public Relations.**—Discussion was resumed on the matter of possible reconsideration of the previous action of the Council and, after full consideration of all circumstances, it was moved and seconded that the Council reaffirm its decision at its annual organization meeting with respect to the employment of a secretary-treasurer and director of public relations. After further discussion the motion was carried (Doctor Kelly voting in the negative).

The committeemen then left the room to confer with Doctor Warnshuis.

9. **Minutes of Meetings of May 12, 1938, and May 8, 9, 10, and 11, 1938.**—The minutes of the annual organization meeting of the Council held at Pasadena, May 12, 1938, as corrected were read to the Council.

Upon motion duly made, seconded and unanimously carried, the minutes as corrected were approved.

The minutes of the meetings of the Council held on May 8, 9, 10, and 11, 1938, were presented and approved.

10. **Notification of Appointment as Secretary-Treasurer and Director of Public Relations.**—Upon motion duly made, seconded and carried, Doctor Warnshuis was directed to notify Doctor Kress of his appointment as Secretary-Treasurer and Director of Public Relations forthwith.

11. **Changes in Personnel.**—On motion duly made, seconded and carried, it was

Resolved, That the Executive Committee or the Chairman of the Council be and they are hereby authorized in the name and on behalf of this Association, California Medical Association, to do such acts and things as shall be necessary in the opinion of either thereof, to effect the changes in personnel of this Association made at the annual organization meeting of the Council held at Pasadena, California, May 12, 1938, and to do such acts and things and take such proceedings as shall be necessary by reason of said changes in personnel.

A vote was taken and said motion carried unanimously.

It was duly moved, seconded and carried, that the Council rise from executive session. Carried.

12. **Date of Next Annual Session.**—Chairman Schaupp presented a letter from Hotel Del Monte outlining desirable dates for the 1939 annual session.

On motion duly made, seconded and carried, May 1, 2, 3 and 4, 1939, was fixed as the date of the next annual session.

13. **Disciplinary Procedures.**—The Chairman announced that he had appointed Anthony Diepenbrock of San Francisco to act as referee in the hearing before the San Mateo

County Medical Society governing disciplinary proceedings against a member of that society. The appointment of the chairman was approved by the Council.

14. **Advisory Committee to Nursing Bureau.**—The Chairman of the Council was instructed to name the three appointees requested by the Department of Public Health to act as an Advisory Committee to the Chief of the Bureau of Nursing Registration.

15. **Woman's Auxiliary.**—A resolution from the Woman's Auxiliary, expressing appreciation of the assistance rendered by the Association during the annual session at Pasadena, was presented for the information of the Council.

16. **Committee on Mental Hygiene.**—A letter regarding the proposed Committee on Mental Hygiene was referred to the Executive Committee for action.

17. **Retired Membership.**—Membership data and the request of the Orange County Medical Society for granting of retired membership to Roland J. Harvey of Anaheim was presented.

On motion of Louis Packard, seconded by Junius B. Harris, the request of the Orange County Medical Society was approved and Dr. Roland J. Harvey was granted retired membership in the California Medical Association.

18. **Medical Care.**—The following resolution was presented to the Council for consideration at the request of Lyell C. Kinney of San Diego.

WHEREAS, The American Medical Association has attempted for many years to appraise and meet the changing problems in the provision and distribution of medical care; and

WHEREAS, The American Medical Association has constantly endeavored to raise the standards of medical practice, and has maintained a fixed policy that any necessary changes in medical practice must improve, and not sacrifice the quality of medical care; and

WHEREAS, It is the policy of the American Medical Association to endeavor to provide adequate medical care to all the people in this country; and to that end the American Medical Association has offered its facilities and its coöperation to any authorized representative of the Government to promote orderly progress and greater efficiency in the provision of medical care; and

WHEREAS, There is a constant and determined attack upon the American Medical Association in lay magazines, in an effort to discredit the policies of the American Medical Association with the public and the Government, and to misrepresent the work and ideals of the Association, and to mold public opinion against the Association; therefore, be it

Resolved, That the House of Delegates of the American Medical Association direct the Board of Trustees to develop an aggressive and forceful program of Public Relations in the Bureau of Health Instruction to inform the public and governmental agencies concerning the policy of the American Medical Association in regard to changes in medical practice, and the reasons therefor; and be it further

Resolved, That it is the judgment and the request of the House of Delegates that the Bureau of Health Instruction employ outstanding professional Public Relations Counsel to direct a sustained program for the purpose of presenting to the public the true facts concerning the need for medical care, and the position of the medical profession concerning the problems involved.

It was moved, seconded and carried, that the Council endorse the resolution as presented and authorize Doctor Kinney, as delegate, to present it on behalf of the California delegation.

19. **Legal Department Stenographic Service.**—The Auditing Committee approved the expenditure of $75 per month for stenographic service for the legal department, commencing June 1, 1938, as authorized by the Council at Pasadena.

20. **American Medical Association Survey of Medical Care.**—It was moved by Junius B. Harris, seconded by Alfred Phillips, that the Chairman of the Council contact Doctors West, Bauer, or Leland and ascertain what action is desired in relation to the American Medical Association Survey on Medical Care, and report to the Executive Committee. Carried.

21. **Farm Bureau.**—Dr. Henry Rogers reported on the conference with the Farm Bureau representatives and suggested that another conference with the Council be called. The report of the Committee and related correspondence was read by Doctor Rogers. No action.

22. **Executive Session.** . . .

. . . At the suggestion of Doctor Kelly, the Conciliation Committee was continued to confer further with Doctor Warnshuis and in the event that a reasonable settlement was offered that it be sent out to the Council for approval by mail vote.

23. **Adjournment.**—There being no further business the meeting adjourned.

KARL L. SCHAUPP, *Chairman.*
LOUIS A. PACKARD, *Acting Secretary.*

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Minutes of the Two Hundred and Sixty-Seventh Meeting of the Council of the California Medical Association

The Council convened at 9 a. m., Saturday, October 1, 1938, in the office of the Association, Room 2004, 450 Sutter Building, San Francisco.

1. **Roll Call.**—The meeting was called to order by Chairman Schaupp. Following councilors were present: Doctors Schaupp, Anderson, Roblee, Phillips, Scatena, Kiger, Reinle, Gilman, Wilson, Rogers, Emmons, Dukes, Goin, Morrow, Hamlin, Packard, Kress; Mr. Peart and Mr. Hassard.

T. Henshaw Kelly arrived after the noon recess.

Absent: Doctors Harris, Howson and Tanner.

After informal reports by Doctors Henry S. Rogers of Petaluma and Louis A. Packard of Bakersfield, on behalf of the special committees of which they were chairmen, an exchange of opinion was had on the nature of topics which might come up for discussion in the conference with the Farm Bureau representatives, which was to follow.

At 10 a. m. the Council recessed, the members going to the Sir Francis Drake Hotel, which had been designated as the meeting place for the conference with representatives of the California Farm Bureau.

2. **Farm Bureau Conference.**—The conference was held in Room 302 in the Sir Francis Drake Hotel. A previous conference with a special committee of the California Medical Association had been held on Saturday, May 28, 1938, the present conference being called to bring about a clearer understanding on problems of mutual interest concerned with public health, medical service, hospital needs and allied matters.

The conference was called to order by Council Chairman Schaupp, who in turn introduced Dr. W. W. Roblee of Riverside, President of the California Medical Association, who acted as chairman of the conference.

The conference continued until 12:30 noon, at which time luncheon was served. After luncheon, the conference again convened. All representatives of the Farm Bureau spoke and gave information of real importance on the medical service and other needs of the farmer population in California. Their own well-planned organization was explained and some of their objectives indicated. After a free expression of opinion by the Farm Bureau and other representatives, President Roblee requested Councilor Louis A. Packard, who had completed an extensive trip throughout the state, to give to those present some of his observations A general discussion followed, and it was agreed that it was desirable that the progress which had been made should be followed up through the appointment of a special committee to represent the California Medical Association to meet with and confer further on next steps in procedure, as regards prospective legislation and other matters having as their object the attainment of ends on which mutual agreement had been made.

It was moved by Charles Dukes, seconded by Howard Morrow, that a committee, consisting of Doctors Rogers, Packard, and Reinle, be appointed to confer with the Farm Bureau, hospital and dental representatives, in line with the opinions agreed upon in the conference. Carried.

At 4 p. m. the conference came to an end, President Roblee expressing to the Farm Bureau representatives the appreciation of the Council of the California Medical Association for their attendance and coöperation.

Council Chairman Schaupp then resumed the chair.

3. **Minutes of the Council.**—(a) *Organization Meeting.* The minutes of the organization meeting (two hundred and sixty-fifth meeting) of the Council. held on Thursday, May 12, 1938, were presented, these having been approved at the special meeting of June 11, 1938.*

J. B. Harris, who acted as chairman *pro tem* of the meeting, was instructed to edit the minutes for publication and resubmit them to the Council at the meeting to be held tomorrow (Sunday, October 2, 1938).

(b) *Special Meeting.*—The minutes of the special meeting (two hundred and sixty-sixth meeting) of the Council (an executive session) held in San Francisco on June 11, 1938, were presented.

It was moved by Lowell S. Goin, seconded by T. Henshaw Kelly, that a committee† of two members of the Council be appointed to edit the minutes before submission for approval or publication. Carried.

4. **Minutes of the Executive Committee.**—The minutes of the one hundred and fifty-ninth meeting of the Executive Committee were presented.

It was moved by Charles A. Dukes, seconded by Howard Morrow, that the digest of the minutes of the one hundred and fifty-ninth meeting of the Executive Committee, as published in the September JOURNAL, be approved. Carried.

It was moved by Harry H. Wilson, seconded by Charles A. Dukes, that a committee, consisting of the Chairman of the Executive Committee, review the minutes of the one hundred and fifty-ninth meeting the the Executive Committee and that revised copies of the complete minutes be sent to all members of the Council. Carried.

5. **Financial Statements.** — Financial statement for the month of August was presented and, there being no objection, was approved.

The Secretary was authorized to clarify the monthly financial statements by the addition of columnar totals and was instructed to include a record of membership in each monthly statement.

6. **Indemnity Defense Fund.**—A bill from Ernst & Ernst, certified public accountants, for auditing the accounts of the Indemnity Defense Fund as of June 30, 1938, in the sum of $75 was presented.

It was moved by T. Henshaw Kelly, seconded by Charles A. Dukes, that the bill of Ernst & Ernst for $75 be paid by the California Medical Association. Carried.

7. **Annuity Insurance Premiums.**—It was the sense of the Council that the section of the report of the Special Committee on Expenditures of the Association relating to annuity insurance for clerical employees be complied with and that the premium covering the policy of Miss Smith be paid by her.

8. **Office Assistants.**—The Secretary stated that extra Association activities that were in contemplation and additional work of the Committees on Postgraduate Activities and Pneumonia Control would require the service of an expert stenographer.

It was moved by Howard Morrow, seconded by William H. Kiger, that the matter of change in office assistants be left in the hands of the Secretary and he be authorized to secure a stenographer at $125 to $150 per month. Carried.

9. **Committee on Hospitals, Dispensaries, and Clinics.** It was moved by Charles A. Dukes, seconded by George G. Reinle, that the resignation of Daniel Crosby as chairman of the Committee on Hospitals, Dispensaries, and Clinics, be accepted with regret. Carried.

It was moved by Charles A. Dukes, seconded by George G. Reinle, that the mail vote of the Council on the election of W. E. Mitchell as chairman of the Committee on Hospitals, Dispensaries, and Clinics be confirmed and approved. Carried.

10. **Committee on Pneumonia Control.**—For the information of the Council, the Secretary stated that the Committee on Pneumonia Control had outlined a plan of procedure which might entail clerical work and coöperation in the Central Office of the Association.

11. **Golden Gate Exposition.** — T. Henshaw Kelly, Chairman of the Committee on Exhibits at the Golden Gate Exposition, stated that he had contacted Mr. Silverman, Director of Exhibits in the Health and Science Building, and that he was at present negotiating for floor space. For the information of the Council, Doctor Kelly outlined a plan for a booth on cancer, which could be erected and maintained during the Exposition at a cost not to exceed $5,000.

The Secretary stated that at present there was available in the Herzstein Bequest for use in the preparation of such exhibit, $2,687.23.

It was moved by Charles A. Dukes, seconded by George G. Reinle, that the California Medical Association advance $3,000 for use in the preparation of an exhibit at the Golden Gate Exposition that would promote the objectives outlined in the bequest of the late Dr. Morris Herzstein, and that the moneys be refunded from the Herzstein Bequest income, as received; and that the booth be under the charge of the Special Committee for the Golden Gate International Exposition, of which T. Henshaw Kelly is chairman.

12. **Committee on Hard of Hearing.**—The Secretary presented a folder distributed by the Section on Ophthalmology and Otolaryngology's Committee on the Hard of Hearing and called the attention to the unauthorized use of the name "California Medical Association" in the title thereof. Doctor Kress stated that the pamphlet had been excellently prepared and for a much-needed purpose, but the use of the name of the California Medical Association was not in accord with the by-laws or rules laid down by the Council.

It was moved by Charles A. Dukes, seconded by A. E. Anderson, that the attention of the Chairman of the Section on Ophthalmology and Otolaryngology and of the Section's subcommittee be called to the Council ruling on the use of the name of the Association, and that the Section be asked to first secure such approval before sending out any additional literature. Carried.

13. **Department of Public Relations Bulletin.**—George G. Reinle, Chairman of the Committee on Public Relations, advised that the Committee had discussed the desirability of publishing a bulletin for the department as material accumulated and needs arose for such a pamphlet.

It was moved by Calvert Emmons, seconded by George G. Reinle, that publication of a "bulletin" for the Department of Public Relations, when the dissemination of valuable information was desired, be authorized and that the expense thereof be charged against the budget of the Department of Public Relations. Carried.

14. **Recess of Council.**—At this point, on motion of Charles A. Dukes, seconded by George G. Reinle, the Council recessed until 9 a. m., Sunday, October 2, 1938.

15. **Reconvening of Council.**—The Council reconvened at 9 a. m. in Room 302, Sir Francis Drake Hotel, on Sunday, October 2, 1938, with the following members present: Doctors Schaupp, Anderson, Roblee, Phillips, Scatena, Kiger, Packard, Reinle, Harris, Gilman, Wilson, Rogers, Emmons, Dukes, Goin, Kelly, Hamlin, Morrow, Howson, Kress; Mr. Peart and Mr. Hassard.

Absent: Doctor Tanner.

16. **California and Western Medicine.**—The Council gave its approval to the recommendation of the Executive Committee that the members of the Nevada State Medical Association be again granted affiliation with CALIFORNIA AND WESTERN MEDICINE on the same basis for acceptance

* Item 9 of Minutes of that meeting.

† Committee appointed: President W. W. Roblee and Council Vice-Chairman Junius B. Harris.

of articles and news as apply to California members, provided that the Nevada State Medical Association agreed to cover approximate costs of CALIFORNIA AND WESTERN MEDICINE through the payment by its treasurer of $3 each for the entire membership of the Nevada State Medical Association.

17. **Medical Libraries.**—It was moved by Charles A. Dukes, seconded by A. E. Anderson, that medical libraries be allowed a 25 per cent discount from the regular subscription price. Carried.

18. **Agencies.**—It was moved by A. E. Anderson, seconded by George G. Reinle, that subscription agencies be allowed a discount of 20 per cent from the regular subscription price of the JOURNAL. Carried.

19. **Editorial and Secretarial Position.** — After discussion of a letter received from a member of the Association requesting consideration of his application for a position as assistant secretary and assistant editor, it was moved by Charles A. Dukes, seconded by A. E. Anderson, that such office be not created at this time; and the Chairman of the Council be instructed to write to the inquiring member and advise him of the Council's action. Carried.

20. **Humane Pound Initiative.**—The action of the Executive Committee in recommending that the Council appropriate not to exceed $10,000 for educational purposes in connection with the importance of animal experimentation in medical research and the proposed State Humane Pound Act (Initiative No. 2 on the November 8, 1938, State election ballot), was discussed.

P. K. Gilman, campaign manager of the California Society for the Promotion of Medical Research, then outlined the activities and plans of that organization. Doctor Gilman stressed the need of financial support for the carrying on of educational work over the radio, through the press and in public meetings, stating that the present plans of the California Society for the Promotion of Medical Research would require $6,000, to be used for radio, printing, and newspaper publicity. Doctor Reinle stated that $2,500 had been appropriated by the Alameda County Medical Association at its meeting a week ago, to aid in protecting medical research, the Alameda County Association contributing to the cause the sum of $5 for each of its members.

It was moved by William W. Roblee, seconded by Charles A. Dukes, that $3,000 of the $10,000 suggested by the Executive Committee to be allocated by the Association be placed at the disposal of the California Society for the Promotion of Medical Research, with the provision that none of such sum shall be used for salaries. Carried.

The members of the Council felt that a plan should be developed to secure aid from county medical societies, and that county auxiliaries should also be contacted to aid in carrying out the plan of distribution of educational literature through physicians to their patients.

It was moved by T. Henshaw Kelly, seconded by W. W. Roblee. that the Council authorize the necessary expenditure, not to exceed $7,000, and that the Association Secretary be instructed to begin the development of a plan which will place in the hands of members' patients a letter not less than forty-eight hours prior to the November 8 election requesting the patient, as the physician's friend, to vote against the bill, and thereafter the Central Office of the California Medical Association is to be the coördinating agency in the development of the machinery to carry out this plan; and that the responsibility of supervising the carrying out of the plan be through a committee composed of P. K. Gilman, T. Henshaw Kelly, and George H. Kress. Carried.

Upon the suggestion of Dr. Goin, Dr. J. W. Crossan of Los Angeles was added to the committee.

21. **Nursing Practice Act.** — The proposed Nursing Practice Act as submitted by the California Nurses' Association was presented, and on motion of Charles A. Dukes, seconded by Alfred Phillips, the same was referred to the Committee on Public Policy and Legislation for study and report. Carried.

22. **Medical Practice Act.**—T. Henshaw Kelly, Committee of One, appointed by the Executive Committee, reported on proposed amendments to the Medical Practice Act relating to interns as outlined in a recent ruling of the Attorney-General, whereby interns in California hospitals who had been graduated in other states and who had an M. D. degree, but who were not yet licensed in California, violated the Medical Practice Act, subjecting themselves, the hospitals, and the physicians under whom they worked, to legal prosecution. Doctor Kelly then presented a tentative draft of a proposed amendment and stated he had discussed this amendment with Doctor Harris and that it was planned to secure the views of the Board of Medical Examiners thereon at its meeting on October 15.

It was moved by William H. Kiger, seconded by Charles A. Dukes, that the Council approve the recommendations of the Committee.

A vote was taken on the motion; motion carried, Doctors Rogers and Packard voting in the negative.

23. **Institutions Commission.**—Doctor Kress made a progress report concerning a proposed Los Angeles County Institutions Commission and stated the Los Angeles County Grand Jury had brought in a report to the Los Angeles County Board of Supervisors, recommending the establishment of such a commission to supervise the administration of the Los Angeles County Hospital, Olive View Sanatorium, and Rancho Los Amigos (County Farm).

24. **San Mateo Hearing.**—It was moved by Charles A. Dukes, seconded by Junius B. Harris, that on behalf of the Council a letter of appreciation be sent Dr. Anthony Diepenbrock for his services in acting as referee in the San Mateo hearing. Carried.

25. **San Francisco Hearing.**—A letter was presented from the secretary of the San Francisco County Medical Society stating that the date of hearing of the charges in the case of *A. S. Green* and *Martin I. Green* vs. *Dohrmann Pischel*, had been fixed as October 24, 1938.

26. **San Diego Hearing.**—The Secretary reported that, in accordance with a request received from Dr. Roy Stevenson, he would forward a copy of the transcript of the minutes of the hearing as conducted at the Pasadena session, upon receipt of the check to cover cost of stenographic services.

27. **Membership.**—The Los Angeles County Medical Association having recommended for retired membership Dr. William H. Gilbert of Laguna Beach, who had permanently retired from practice, on motion of T. Henshaw Kelly, seconded by P. K. Gilman, William H. Gilbert of Laguna Beach was granted retired membership in the California Medical Association.

28. **Prospective Membership.**—It was the sense of the Council that the regular procedure in regard to checking membership applications with the Board of Medical Examiners and the American Medical Association be continued and that Section 8 (b) of Chapter II of the by-laws of the Association on "residence requirement," which stipulates at least six months' prior residence, must be had before election to membership, be observed in all cases.

29. **Association Membership.**—It was moved by William Roblee, seconded by A. E. Anderson, that the former member of the Alameda County Medical Association who desired to remit dues without entailing membership in the County or State Associations and without rsponsibility for the transactions of the Association, be informed that it will be impossible to receive dues under these provisions. Carried.

30. **County Society Members on Leaves of Absence.** It was the sense of the Council that there was no provision whereby membership could be retained in the State Association by members who had been granted leaves of absence from county societies except by regular payment of the State dues, which, if paid, would also entitle the member to automatic membership in the American Medical Association. Fellowship in the American Medical Association would then also be possible, provided the American Medical

Association member made application therefor, enclosing subscription to the *Journal of the American Medical Association* ($7).

31. **Special Meeting of American Medical Association.** President William W. Roblee read a report on the special meeting of the American Medical Association held in Chicago, September 16 and 17, 1938. The report to be printed in the October, 1938, issue of CALIFORNIA AND WESTERN MEDICINE.

32. **Medical and Hospital Indemnity Policies.**—General Counsel Peart read a letter prepared in accordance with instructions from the Executive Committee for transmission to all county societies, regarding medical and hospital indemnity policies.

A discussion was had as to the scope and interpretation of policies of "for-profit organizations" and their effect on "nonprofit organizations"; the dangers involved when such "for-profit policies" were approved being outlined. It was pointed out that the policies constituted a contract between the insurance company and the patient and not between the insurance company and the physician.

A letter submitted by Mr. Peart, and to be sent to the secretaries of the several component county societies advised as to the course to be followed with reference to solicitation for endorsement of such policies either by the insurance company or by the insured.

Dr. Charles A. Dukes suggested that the letter be amended by a clause calling attention to the fact that the Association had approved three nonprofit associations and corporations furnishing hospital insurance.

It was moved by Charles A. Dukes, seconded by Alfred L. Phillips, that the letter, with suggested amendments, be approved. Carried.

33. **Palo Alto Hospitalization Group.**—The Secretary read a letter written to Russell V. Lee, regarding the Palo Alto Hospitalization Group.

The Council restated its former action and rule that all plans for hospital or medical service submitted for the approval of the State Association must be submitted through the respective county society to the California Medical Association's Committee on Public Relations for report and recommendation to the Council.

A letter on these matters from the Santa Clara County Medical Society was read and the Secretary was instructed to call attention to the procedure to be followed before endorsement could be given by the county society.

34. **Diagnostic Medical Service.**—The Secretary read a letter from Dr. L. H. Garland, addressed to Council Chairman Karl Schaupp, dated September 1, 1938, requesting that diagnostic medical service through indemnification be eliminated from the policies of the Insurance Association of Approved Hospitals. Full discussion was had.

It was moved by Charles A. Dukes, seconded by George G. Reinle, that the Council Chairman appoint a Committee of Three to confer with representatives of the Pacific Roentgen Society and with the Insurance Association of Approved Hospitals. Carried.*

It was moved by Charles A. Dukes, seconded by George G. Reinle, that a Committee of Three be appointed for the purpose of studying medical service on an indemnification basis on a periodic payment plan and to bring in a report thereon to the Council. Carried.†

35. **Woodland Clinic.**—The Secretary read a letter from Dr. John Homer Woolsey, regarding a proposed survey of the Clinic. The Council concurred in the sentiments expressed by Doctor Woolsey regarding such survey.

36. **Mono-Inyo County Society.** — The Secretary reported that plans were under way for the formation of a medical society that would make application for a charter as a county medical society for Mono and Inyo counties.

37. **Exhibits at Annual Session.**—The Secretary reported on plans for exhibit space at the Del Monte session, and on motion of Louis A. Packard, seconded by A. E. Anderson, the plan as outlined was approved and the Secretary was authorized to proceed and to make all necessary arrangements.

38. **Committee on Arrangements.**—In accordance with Section 6 of Chapter IV of the by-laws, the Chairman, with the approval of the Council, named as the local Committee on Arrangements for the Del Monte annual session, May 1 to 4, 1939, the following: Doctors Mast Wolfsohn, Monterey (Chairman); Alfred L. Phillips, Santa Cruz; W. M. Gratiot, Monterey; Curtis B. Gorham, Monterey; and H. R. Lusignan, Monterey, with the Association Secretary, ex-officio member, as per the by-laws.

39. **State Dental Association.**—It was the sense of the Council that the California State Dental Association be invited to exhibit at our annual session if space is available.

40. **Western Urological Association.**—It was the sense of the Council that the Western Urological Association be invited to let the exhibits they are to have at the Del Monte Hotel just prior to our meeting remain in place during our session, provided space in the Section for Scientific Exhibits be available.

41. **California Medical Association Forestry Service.** After discussion the Council ordered that the activities in regard to the Forestry Reserve be carried on through the Central Office of the Association.

It was moved by Howard Morrow, seconded by George Reinle, that the Secretary of the Association act as chief medical officer of the California Medical Association Forestry Service. Carried.

42. **Amendment to Employees' Compensation Act.**—The Secretary reported that the United States Employees' Compensation Act, Section 40, had been amended to include in the term "physician" in services rendered to federal employees, osteopathic practitioners within the scope of their practice as defined by State law.

Doctor Schaupp reported that the Agricultural Workers' Health and Medical Association limited itself to physicians and surgeons who were eligible to membership in their county medical societies.

43. **X-Ray Service.**—It was reported that the United States Public Health Service had contemplated an x-ray service at the Golden Gate Exposition, but after further consideration the matter had been dropped. Doctor Morrow reported that the California State Board of Public Health had discouraged the plan.

44. **Balopticon Lanterns.**—The Secretary reported on the lanterns for use at the annual session, stating that all were in order. One was especially designed for use for long-range lantern-slide display and one for opaque display, and that the other six were for use in the ordinary size section room.

45. **Councilor Expense.**—After discussion, it was moved by William H. Kiger, seconded by Charles A. Dukes, that councilors and officers of the Association be allowed $5 per day, plus round-trip fare and lower berth, for authorized meetings or conferences on Association business held at places other than their immediate home communities. Carried.

46. **Reprint Costs.**—A letter from a member of the Association asking for a reduction in the price of reprints for quantity order was presented.

It was moved by Charles A. Dukes, seconded by Lowell A. Goin, that the matter of price of reprints in quantity lots be left to the judgment of the Secretary. Carried.

47. **Council Meeting.**—It was moved by Charles A. Dukes, seconded by Alfred L. Phillips, that the next meeting of the Council be held in Los Angeles in January, the exact time to be set by the Chairman of the Council. Carried.

It was stated that the date and place of the conference of county society secretaries with councilors and members

* The Committee appointed consists of Doctors George G. Reinle, Chairman, Oakland; T. Henshaw Kelly, San Francisco; and Robert S. Stone, San Francisco.

† The Committee agreed upon consists of Charles A. Dukes, Oakland, Chairman; T. Henshaw Kelly, San Francisco; Lowell S. Goin, Los Angeles.

of standing committees would be decided later, possibly in late January or early February, Doctor Harris, Chairman of the Committee on Public Policy and Legislation, to be consulted in regard to the best time for holding the meeting.

48. **Medical Economic Survey.** — It was moved by Charles Dukes, duly seconded, that a copy of the California Medical Economic Survey be sent to each state medical society and each State Board of Health. Carried.

49. **California Medical Economic Survey.** — A letter from a member was read in which request was made that the full report as submitted by the Survey Director, be sent to him for perusal.

It was the sense of the Council that any member who desired to see the voluminous original report of the Director of the California Medical-Economic Survey be informed that it was open for inspection in the Association office in the city of San Francisco.

50. **Registration of Physicians' Licenses.**—The matter of legal right of a physician to practice and collect fees from patients residing in an adjoining county, wherein his certificate had not been registered was discussed (in relation to a letter received from a member who suggested a legislative amendment to make such registration unnecessary).

It was moved by William Roblee, seconded by Henry Rogers, that physicians be advised to register their licenses according to the requirements of the existing law. Carried.

51. **"Thirty-Dollar Thursday Plan."** — The proposed pension, known as "Thirty-Dollar Thursday," was presented for informative purposes. No action was taken.

52. **Retired Membership Forms.**—The Secretary was authorized to revise the present retired membership blanks to include therein the stipulations concerning "retired members," as contained in Article IV, Section 1 (c) of the Constitution of the California Medical Association.

53. **Herzstein Bequest.**—The Secretary reported that a full report on the income from the Herzstein Bequest had been filed with the Association by the Wells Fargo Bank and Union Trust Company and was open for inspection at the Association offices.

54. **Editorial Policy.**—It was the sense of the Council that the Editor was authorized to edit copy received for publication in the JOURNAL as provided in Item 13 of the Council's pamphlet, "Suggestions to Authors," and the action taken in not printing certain resolutions in recent numbers because of Association policy and interests, as recommended by the Executive Committee, be approved.

55. **Four Fifty Sutter Building.**—The Secretary stated that he had made request of the Four Fifty Sutter Building for additional storage space, and that the corporation had generously allocated one-half of what was formerly the office of the Cancer Commission, without increase in present rent.

It was moved by T. Henshaw Kelly, seconded by P. K. Gilman, that a letter of appreciation be sent to the Four Fifty Sutter Corporation. Carried.

56. **Recess.** — At this point a recess was taken for luncheon.

57. **Call to Order.**—After the noon recess the Council was called to order by Chairman Schaupp.

58. **Policies of Association.**—It was moved by William H. Kiger, seconded by T. Henshaw Kelly, that the "Report of Special Committee Concerning Policies of the Association" be considered. Carried.

It was moved by Carl Howson, seconded by T. Henshaw Kelly, that the name of the "Committee Concerning Policies of the Association" be changed to read: "Special Committee Concerning Statement of Policies of the Association"; and secondly, that the Secretary be empowered to receive the report of the Committee and carry out its instructions. Carried.

The Committee named includes: George G. Reinle of Oakland, Chairman; W. W. Roblee, Riverside; Lowell S. Goin, Los Angeles; C. A. Dukes, Oakland; and J. B. Harris, Sacramento.

It was moved by Carl R. Howson, seconded by A. E. Anderson, that the Committee meet and announce the policies and that each member of the Council receive a copy of such announcements for consideration and suggestions prior to formal printing and distribution. Carried.

59. **Office Assistants.**—It was moved by William W. Roblee, seconded by Charles A. Dukes, that the question of office assistants be reconsidered. Carried.

After discussion of the additional clerical work in the Association offices in connection with postgraduate activities, legislation and various committees, it was moved by William W. Roblee, seconded by Charles A. Dukes, that the former action of the Council, on October 1, be rescinded. Carried.

It was moved by William Roblee, seconded by T. Henshaw Kelly, that the Secretary at his discretion employ an additional stenographer at a starting salary of not to exceed $125 per month. Carried.

60. **American Medical Association Annual Meeting.** The Secretary stated that Dr. Alanson Weeks, Treasurer of the Local Committee on Arrangements for the 1938 annual meeting of the American Medical Association, had sent a refunder check for one thousand dollars ($1,000) which had been donated by the California Medical Association for entertainment of the national organization during its meeting in San Francisco.

It was moved by T. Henshaw Kelly, seconded by P. K. Gilman, that a letter of appreciation, in the name of the Council, be sent the Local Committee. Carried.

61. **Minutes of Council.**—The minutes of the annual organization meeting of the Council held on May 12, 1938, previously approved by the Council, were presented as edited for publication by the vice-chairman and the president, and, there being no objection, said minutes as edited were approved for publication.

The minutes of the special meeting of the Council held on June 11, 1938, were thereupon presented by the Committee of Two, previously appointed, for approval and, there being no objection, were approved. Said minutes of the special meeting held on June 11, 1938, as edited for publication by the Committee, were thereupon presented and, there being no objection, said minutes as edited were approved for publication.

62. **Minutes of the Executive Committee.**—It was moved by T. Henshaw Kelly, seconded by Charles A. Dukes, that the minutes of the one hundred and sixty-fifth meeting of the Executive Committee on August 13, 1938, be approved as read by the Chairman.

63. **Report on Transfer of Association Records and Change in Administrative Offices.**—The Chairman then requested General Counsel Peart to present the report of the Council Chairman in the matter of change in the position of Secretary-Treasurer, who then read to the Council the report of Dr. Karl L. Schaupp, Chairman of the Council, dated June 6, 1938, and in connection therewith Mr. Peart presented to the Council the several documents attached thereto as follows:

(*a*) Written direction of the Council to effect settlement with Dr. F. C. Warnshuis.

(*b*) Audits of the books and records of the California Medical Association and Trustees Of The California Medical Association as of June 30, 1938, prepared by the Association's accountants, Messrs. Ernst & Ernst.

(*c*) Release dated June 30, 1938, F. C. Warnshuis to California Medical Association et al.

(*d*) Resignation dated June 30, 1938, of Dr. F. C. Warnshuis as a member, director, and secretary of Trustees Of The California Medical Association.

(*e*) Copy of receipt dated June 30, 1938, from Dr. Karl L. Schaupp, as chairman of the Council, to Dr. F. C. Warnshuis for the property, books and records of the Association.

(*f*) Copy of receipt dated June 30, 1938, from Dr. Karl L. Schaupp, as treasurer of Trustees Of The California Medical Association, to Dr. F. C. Warnshuis for the property, books and records of Trustees Of The California Medical Association.

On motion duly made, seconded and unanimously carried, the following resolutions were adopted:

Resolved, That the action taken by individual members of the Council comprising all but three members thereof, in authorizing the settlement made with Dr. F. C. Warnshuis as set forth in the report of the chairman of the Council, dated July 6, 1938, be and the same is hereby ratified, approved and confirmed; and be it further

Resolved, That the acts and proceedings of Dr. Karl L. Schaupp, as chairman of the Council, in effecting said settlement as set forth in said authorization and in his said report and each thereof be and the same are hereby ratified, approved and confirmed.

64. **Letter from Former Association Secretary.**—1. A letter dated June 30, 1938, from Secretary F. C. Warnshuis and addressed to the chairman and members of the Council and dealing with California Medical Association activities was presented for consideration.

It was moved by T. Henshaw Kelly, seconded by J. B. Harris, that the letter from F. C. Warnshuis on Association activities be ordered filed. Carried.

2. A second letter, dated June 22, 1938, from Secretary F. C. Warnshuis and addressed to county presidents and secretaries and dealing with California Medical Association activities, was also presented.

Legal Counsel Peart requested permission to file a report in answer to the statements made in the letters.

Editor Kress also requested permission to file a report covering statements made in regard to CALIFORNIA AND WESTERN MEDICINE.

It was moved by T. Henshaw Kelly, seconded by J. B. Harris, that the replies of the General Counsel and the Editor to statements made in regard to the legal department in the letter of Doctor Warnshuis on Association activities be mailed to each member of the Council. Carried.

65. **Special Conference Committee.** — Doctors Rogers and Packard inquired as to the scope of activities and the powers of the newly appointed committee to confer with Farm Bureau representatives.

It was moved by J. B. Harris, seconded by Charles A. Dukes, that the oral report of the Committee, as submitted by Doctor Packard, be accepted and the Council express its confidence that this committee will proceed along the lines outlined. Carried.

66. **County Hospital Committee.**—Doctor Packard reported on the work that he had carried on in connection with the County Hospital Committee and his travels throughout the state.

The Secretary was instructed to send to Doctor Packard a copy of the regulation expense blank, which would be filled out by Doctor Packard and submitted to the Auditing Committee for approval.

67. **California Unemployment Reserves Tax, Federal Income Tax, Federal Social Security Tax, Capital Stock Tax.**—Mr. Howard Hassard, assistant to the General Counsel, explained the recent ruling made by the Treasury Department of the United States in granting exemptions to the Association from income tax and capital stock tax, upon the basis that the Association constitutes a "business league"; also advising the Council that this ruling would subject the Association to the Federal Social Security Act and the California Unemployment Reserves Tax Act, but would not subject it to the Federal Capital Stock Tax Act or the Federal Income Tax Act. The General Counsel supplemented this report with a detailed written report, dated September 27, 1938, which was filed with the Association Secretary.

68. **Indemnity Policies of Insurance Companies.**—(*a*) The General Counsel presented a letter addressed to him by Dr. L. H. Garland of San Francisco, dated September 23, 1938, requesting the General Counsel to take up with Pacific Employers' Insurance Company certain amendments to its policies dealing with hospital and medical benefits.

On motion of Charles A. Dukes, seconded by J. B. Harris, Doctor Garland's letter was referred to the General Counsel for further consideration and consultation, and report back to the Council.

69. **Medical and Hospital Indemnity Insurance.**—The General Counsel referred to his report on medical and hospital indemnity insurance and suggested that the report be referred to the Special Conference Committee.

There being no objection it was so ordered.

70. **Pacific Health Corporation.**—The General Counsel reported that the Supreme Court of California, by a four to three decision, had decided the case of *People* vs. *Pacific Health Corporation*, and that the decision of the Court affirmed the previous decision of the trial court, which was to the effect that Pacific Health Corporation had no right or power legally to furnish to its members the services of physicians and surgeons. The General Counsel stated that this decision firmly establishes that capital stock corporations may not designate, appoint or otherwise control the selection of physicians by patients.

71. **Butterworth versus Boyd.**—The General Counsel reported that this case, involving the constitutionality of the San Francisco Charter amendment authorizing the city employees to establish a health service system, had been decided and the constitutionality of the amendment upheld in a six to one decision.

It was moved by T. Henshaw Kelly, seconded by Carl Howson, that the General Counsel be instructed to prepare and present to the Council an opinion analyzing for the information of the Council the San Francisco Charter amendment as affected by the decision in *Butterworth* vs. *Boyd*, and Plan No. 1 as now in operation. Carried.

72. **Graun versus Harder.**—The General Counsel stated that at the present time this case was quiescent.

73. **Engleking versus Carlson.**—Mr. Peart stated that this case, involving application of *res ipsa loquitur* doctrine, would come up for hearing next week and he was associated with the attorneys for the insurance company and would personally make the argument.

74. **Legislation.**—The General Counsel requested that he be furnished, at the earliest possible moment, with memoranda concerning any proposed legislation.

It was the sense of the Council that a letter should go out to the county societies advising them that all proposed legislation should be submitted at an early date to the Committee on Public Policy and Legislation.

75. **Osteopathic Physician Cases.**—Mr. Peart outlined the situation in Visalia in regard to the demand of an osteopathic physician to be allowed to practice in the municipal hospital. and referred to a decision rendered by the United States Supreme Court in which that court held that an osteopathic physician in Galveston, Texas, had no constitutional right to practice in the Galveston municipal hospital. Mr. Peart also reported with respect to the status in the case of *Jordt* vs. *State Board of Education*, which is a mandamus proceeding by an osteopathic physician, brought by the osteopathic physician for the purpose of forcing the State Board of Education to grant to him a health and development certificate. Mr. Peart stated that, in his opinion, the United States Supreme Court decision above referred to, and several other decisions in other states, might well be held by the California court to preclude the granting of a writ of mandamus. Mr. Peart pointed out, however, that the case was not as yet decided and hence no formal opinion on its merits was proper at this time.

76. **Uniform Compensation Medical Report Blanks.**—The General Counsel stated that he had taken up with the president of the Casualty Attorneys' Claims Association

the desirability of the adoption of a uniform medical report blank for all compensation insurance carriers.

77. **Kings County Hospital**—It was moved by Lowell S. Goin, seconded by C. A. Dukes, that the bill of Mr. Siemon for services rendered in connection with the county hospital situation, in the amount of $67.50, be paid. Carried.

78. **Fresno City Physician.**—The General Counsel reported that he had rendered an opinion to Doctor Anderson, at his request, on a type of contract practice being carried on in the care of city employees at Fresno.

79. **Malpractice Insurance Policies.**—Mr. Peart stated that his office had furnished the Surplus Line Brokers' Association with comments on their proposed rider which is to be attached to policies issued by underwriters at Lloyd's, in London, regarding "surgery," but that, in the absence of instructions from the Council, no opinion had been rendered with respect to the merits or advisability or the subject matter of the proposed rider.

80. **Adjournment.**—There being no further business, on motion of Lowell S. Goin, seconded by William H. Kiger, the meeting adjourned.

KARL L. SCHAUPP, *Chairman.*
GEORGE H. KRESS, *Secretary.*

C. M. A. DEPARTMENT OF PUBLIC RELATIONS†

Subject: Concerning Neon Signs as a Means of Advertising—"Principles of Medical Ethics"

(Copy of an opinion given by Legal Counsel Hartley F. Peart)

San Francisco, California,
October 14, 1938.

Arthur E. Varden, M.D., Secretary,
San Bernardino County Medical Society,
San Bernardino, California.

Re: Use of Neon Sign by Physician; Principles of Professional Conduct.

Dear Doctor:

In regard to the above subject, I have now had an opportunity to examine the Constitution and By-Laws of the San Bernardino County Medical Society in order to determine whether or not a physician who erects a neon sign in front of his office may be considered to be infringing any principles of medical ethics applicable to members of the San Bernardino County Medical Society.

For the purpose of this opinion, I am assuming the facts to be as stated in your letter of October 8, viz: that a member of the Society has erected a large neon sign in front of his office which is located on one of the main streets of the town and that he does not live at his office and the sign burns until late at night. You will understand that my opinion necessarily will be predicated upon the foregoing being the actual facts.

Neither the Constitution nor the By-Laws of the San Bernardino County Medical Society contain any specific principles of professional conduct. The only provisions which relate to professional conduct are the following:

Section 4 of Chapter I of the By-Laws, which adopts the *procedure* for disciplining a member set forth in the By-Laws of the California Medical Association. Subdivision (D) of Section 4 of Chapter I of the By-Laws does provide that anyone who violates any of the provisions of the Constitution or By-Laws or Principles of Professional Conduct of the San Bernardino County Medical Society shall be liable to censure, suspension, or expulsion. Thus, principles of professional conduct are referred to as though they were in existence (if so, they do not appear in the By-Laws). Section 4 of Chapter VII of the By-Laws creates a committee on professional conduct, which committee has the duty of investigating and arbitrating, if possible, all disputes relating to professional conduct. This committee also has, under said Section 4, certain duties in regard to malpractice actions. In this section, principles of professional conduct are again mentioned as though they did exist, but are not set forth.

It appearing that the By-Laws of the Society do not contain any detailed principles of professional conduct, it is necessary in order to determine those principles which are to govern the members to turn to the By-Laws of the California Medical Association which govern all component county societies and the members thereof. Chapter II, Section 2, Subdivision (D), of the By-Laws of the California Medical Association (at page 23 of printed By-Laws), provides that any active member of a component county society who has been adjudged guilty (under the procedure set forth in Section 3, Chapter II of said By-Laws), of a violation of any of the provisions "of the principles of medical ethics promulgated from time to time by the American Medical Association" shall be subject to censure, suspension or expulsion by such component county society. Therefore, we must look to the principles of medical ethics of the American Medical Association in order to find the rules of professional conduct which govern members of the San Bernardino County Medical Society.

Section 4 of Chapter II of the Principles of Medical Ethics of the American Medical Association is entitled "Advertising" and a portion of said section reads as follows:

> **Solicitation of patients by physicians as individuals, or collectively in groups by whatsoever name these be called, or by institutions or organizations, whether by circulars or advertisements, or by personal communications, is unprofessional. This does not prohibit ethical instructions from a legitimate advertisement of location, physical surroundings and special class, if any, of patients accommodated. It is equally unprofessional to procure patients by indirection through solicitors or agents of any kind, or by indirect advertisement, or by furnishing or inspiring newspaper or magazine comments concerning cases in which the physician has been or is concerned. . . . The publication or circularization of ordinary simple business cards, being a matter of personal taste or local custom, and sometimes of convenience, is not *per se* improper. As implied, it is unprofessional to disregard local customs and offend recognized ideals in publishing and circularizing such cards.**
>
> **It is unprofessional to promise radical cures, to boast of cures and secret methods of treatment or remedy; to exhibit certificates of skill or of success in the treatment of diseases; or to employ any methods to gain the attention of the public for the purpose of obtaining patients.**

Whether or not the use of a neon sign in front of a physician's office on the main street of a community constitutes the employment "of any methods to gain the attention of the public for the purpose of obtaining patients" is, of course, a question of interpretation of said Section 4 of Chapter II. It is not my function, in advising county societies with respect to procedure, to indulge in any opinion with respect to the proper interpretation of any of the principles of medical ethics. That problem is one which rests solely with the various county societies, the California Medical Association and, if need be, the Judicial Council of the American Medical Association. I am merely calling to your attention the particular principles of ethics involved and the question to be decided.

I note from your letter and the enclosed copy of a letter from the County Society dated October 5, that the San

† The complete roster of the Committee on Public Relations is printed on page 2 of the front advertising section of each issue. Dr. George G. Reinle of Oakland is the chairman and Dr. George H. Kress is the secretary. Component county societies and California Medical Association members are invited to present their problems to the committee. All communications should be sent to the director of the department. Dr. George H. Kress, Room 2004, Four Fifty Sutter Street, San Francisco.

Bernardino County Medical Society evidently has or contemplates establishing a "rule" with respect to the use of neon signs. If it is the intent of the Society by means of a "rule" or "resolution" to endeavor to establish a principle of professional conduct applicable to the use of neon signs, it is my opinion that such procedure would be very dangerous from the legal point of view. To explain, in the eyes of the law a member of the medical society is bound to observe the Constitution and By-Laws regularly adopted of his Society. If he fails to abide by the Constitution or By-Laws, he may be suspended from membership or expelled, after a full hearing conducted in accordance with the rules of procedure of the Society. Whether or not violation by a member of a simple rule or resolution adopted at a general meeting *which is not part of the Constitution and By-Laws* can be the subject of disciplinary action, is very questionable. Therefore, if the Society contemplates a specific rule of professional conduct relating to neon signs, it is my opinion that such rule should be presented to the membership in the form of an amendment to the By-Laws of the Society, and if adopted, should be adopted in the manner required by the By-Laws (Chapter X) for amendments thereto.

In regard to the matter of adopting rules of conduct by means of resolutions, it is my recollection that the Judicial Council of the American Medical Association recently, by letter, expressed its opinion not recommending such practice. In this connection, see CALIFORNIA AND WESTERN MEDICINE, May, 1938, pages 364-365, and note the letter quoted under the heading: "Resolutions Establishing Principles of Ethics and Conduct," particularly the last paragraph thereof.

If I may be of any further assistance to you, please feel free to call upon me.

Very truly yours,

HARTLEY F. PEART.

111 Sutter Street.

* * *

Subject: An Example of Coöperation Rendered by a County Auxiliary in Work Against the "State Humane Pound Act"—Initiative No. 2

California Medical Association,
San Francisco, California.

Dear Doctors:—The Woman's Auxiliary to the San Diego County Medical Society wishes to assure you that they are anxious to coöperate with you in any way possible to educate the laity in regard to the "State Humane Pound Act."

The Legislative Committee of the Auxiliary, under the leadership of Mrs. W. M. Alberty, have been working actively for four weeks, contacting as many organizations as possible, arranging for speakers and distributing informative pamphlets.

We will hold our annual Health Institute on November 1. At each of the two meetings a doctor will speak on the "State Humane Pound Act." We expect a good attendance because our Institute has been made a Teacher's Institute by Mr. Crawford, superintendent of the San Diego schools. A copy of the program and a Pound Act pamphlet will be handed to every member of the Young Women's Christian Association Business Girls' Clubs.

We had a booth for this purpose at the San Diego County Fair at Del Mar last week. There was a two thousand word article against the Pound Act in the last Parent Teacher's Association *Courier* which has a circulation of nine thousand. There will be a similar article in the *County Graphic* which has a circulation of 83,000. There will be a paid advertisement in the *Thursday Club Bulletin* this month. There was a talk given at the last meeting of the Woman's Civic Center.

Twenty-five thousand pamphlets have been distributed among patients and members of women's clubs.

Seventy-two Parent Teacher's Associations have been contacted, thirteen P. E. O. Chapters, ten Delphian Clubs, the Jewish Women's Societies, all of the auxiliaries to the Veterans of Foreign Wars, Catholic Women's Societies, twenty women's clubs, Junior League, National Business and Professional Women, Soroptomists, all Masonic Women's Organizations, the Pan-Hellenic Group and the Women's University Club.

We shall be very happy to receive any suggestions which you may have to offer.

Sincerely,

(MRS.) H. D. NEWTON,
Secretary.

COMPONENT COUNTY MEDICAL SOCIETIES

CONTRA COSTA COUNTY

The Contra Costa County Medical Society met on Tuesday evening, October 11, at the American Legion Hall in Walnut Creek. The Auxiliary joined the Society to hear Dr. A. M. Meads of Oakland discuss *Anuria and the Urologist,* and Dr. Carson Hunt of Oakland, who read a short paper on *An Explanation of Binocular Vision, Simplified.*

The Society voted its endorsement of the antivenereal disease campaign being launched in Richmond. Doctor Daily explained the organization of the campaign and its management by a citizens' committee with generous representation of the medical profession. Dr. J. C. Dement of the Venereal Disease Division of the State Department of Public Health explained the state-wide campaign against venereal disease and its relation to the local program. Doctor Condit, also of the State Department, and recently appointed syphilologist to conduct the venereal disease clinic at the Richmond Health Center, explained the plan of clinic management.

A committee of twelve, one member from each community in the county, was appointed to work with a like committee from the Auxiliary in distributing literature to be supplied by the California Society for the Promotion of Medical Research in the current campaign to defeat the "State Humane Pound Act," Initiative Proposition No. 2, on the November 8 ballot. The secretary of the county medical society will act as executive head of the committee.

The next meeting, to be held on November 8 at the Carquinez Hotel in Richmond, will be the annual business meeting, at which time officers for the coming year will be elected. The president, Doctor Marks, appointed Doctors Ford, Weil, and Hedges a nominating committee, to report at the November meeting.

Doctors Daily, Fraser, and McCullough were appointed a committee to arrange for the Society's annual Christmas party in December.

THOMAS J. DOZIER, *Secretary.*

SACRAMENTO COUNTY

The regular meeting of the Sacramento Society for Medical Improvement was called to order by the president, Dr. Dave Dozier, on September 20, at the Auditorium, on Twenty-ninth and L streets. Seventy-two members and guests were present.

Dr. Harry Blackfield of San Francisco presented the paper of the evening. Doctor Blackfield gave a very instructive talk on *Plastic Surgery in General Practice,* stressing particularly plastic traumatic surgery of the face and of the hands. Lantern slides of the various types of skin grafts were shown. The discussion was opened by Dr. F. MacDonald and continued by Drs. R. Wallerius and D. Dozier.

Dr. J. B. Harris presented a case of *Scirrhus Carcinoma of the Thyroid* with marked skeletal metastases.

The applications for membership of Drs. A. F. Wallace and Curtis H. McDonnell were read for the first time.

Dr. Dave Dozier gave an oral report on the action taken in regard to the Pacific Employers' Insurance Company policy for the state employees. After some discussion by Doctor Wallerius, a motion was made and so passed that we submit the medical fee schedule of this company to the Council of the California Medical Association for its consideration.

Dr. F. F. Gundrum discussed the function of the *Medical Society of the State of California* and the value of its purposes to members of the California Medical Association.

G. E. MILLAR, *Secretary.*

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SAN JOAQUIN COUNTY

The regular meeting of the San Joaquin County Medical Society was held on Thursday, October 6, in the clubrooms of the Medico-Dental Building. The regular meeting was preceded by the customary supper meeting at the Hotel Wolf at 6:30 p. m. Seventeen members and guests were present. J. W. Barnes of Stockton read a paper on *Undulant Fever,* sketching the history, symptoms, diagnosis and treatment, which was extremely interesting and very well received.

The business meeting was called to order by the president, A. C. Boehmer, at 8:15 p. m. The applications of Doctors Lamb, Dietrich, and Faulkner having been favorably reported upon by the Admissions Committee, and there being no objections from the floor, they were declared elected to membership in the San Joaquin County Medical Society.

Dr. C. A. Broaddus reported on the progress of the Postgraduate Committee work. A progress report was made on the new By-Laws and Constitution by the committee drawing up the same.

P. J. Hanzlik, Professor of Pharmacology at Stanford University, presented a paper on *Bismuth in the Treatment of Lues.* The paper was illustrated by lantern slides and and blackboard drawings and was very instructive, and received considerable discussion from the floor.

There being no further business to come before the Society the meeting was adjourned at 10 p. m. and refreshments served.

G. H. ROHRBACHER, *Secretary.*

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SAN MATEO COUNTY

The meeting of the San Mateo County Medical Society was held at Pier 33, 1447 Burlingame, Burlingame, on September 28.

Doctor Ray announced that an application for membership had been received from Dr. Ivan T. Budaeff.

The secretary read a resolution concerning legislation directed toward compulsory premarital and prenatal tests for the detection of syphilis and gonorrhea which had been passed by the Board of Directors. There was some discussion of this resolution and Doctor Murphy suggested that further study of the problem should be made before the Society passed on the resolution. Accordingly, the president announced that a committee would be appointed to study the subject and report back to the Society at a subsequent meeting.

Doctor Gregory reported on a letter which had been received from the San Mateo County Tuberculosis and Health Society concerning the establishment of diagnostic chest clinics at Community Hospital. The Society voted against the establishment of such clinics, feeling that they would be unnecessary at this time.

The secretary announced that arrangements had been made to establish clinics throughout the county to supplement the work of the out-patient department of the Community Hospital. It was decided to have a rotating service, each doctor to be assigned for a period of three months, with the two following doctors on call during his period of service.

The question of physical examinations for public school children, which involved to some extent the whole issue of the public school health problem, was brought up and discussed by Doctor Knorp. After considerable discussion it was decided to refer the matter to the Public Health Committee for a report at the next meeting.

Dr. Karl Schaupp, the guest of the evening, was next introduced and gave a talk on the question of *Medical Insurance and the Set-up Now in Operation in San Francisco, Known as the City Health Service System.* Doctor Schaupp seemed to feel that Dr. Walter B. Coffey had done a great deal for the organized medical profession in connection with this proposition and also in connection with other matters in the past. He seemed to feel that organized medicine should coöperate with whatever groups or organizations supplying medical care on an insurance basis, whether lay groups or otherwise, until it (organized medicine) had something better to offer. He intimated that a study was being made at the present time concerning a plan which might be introduced at the next session of the legislature.

Following Doctor Schaupp's talk there was considerable discussion, especially on the part of Dr. Carl Hoag, in connection with the City Health Service System in San Francisco. The Society finally voted in favor of supporting the action of the San Francisco County Medical Society in connection with the City Health Service System in so far as the operation of this system affected the physicians practicing in San Mateo County.

J. GARWOOD BRIDGMAN, *Secretary.*

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SOLANO COUNTY

The Solano County Medical Society held a meeting in Vallejo on September 20.

Dr. Carlton C. Purviance, who has recently returned from Europe where he went with Doctor Eloesser to work for the American Hospital in Spain, and who visited in France, Germany, Austria, and Hungary, gave a very interesting talk on *Observations on Social Medicine* and the manner in which it works in those countries.

Applications for membership have been received from Dr. A. Frank Brewer, who has recently been appointed full-time health director in this county, and from Dr. H. Randall Madeley, who has come to Vallejo.

Dr. A. Frank Brewer will be the speaker at our next meeting at the Casa de Vallejo Hotel, to be held on Tuesday night, October 11.

JOHN W. GREEN, *Secretary.*

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TULARE COUNTY

The regular monthly meeting of the Tulare County Medical Society was held in the dining room of Motley's Café in Visalia on the evening of October 2 at seven o'clock.

Dr. Vern Mason of Los Angeles presented the main discussion of the evening. The subject had to do with rare and unusual diseases, their etiology, progress, and treatment. He talked upon *Ulcerative Colitis* and the allied conditions. He discussed acute disseminated erythematous lupus. There was a general discussion upon the subject of coccidioides and erythema nodosum.

Following the main address an informal round-table discussion was held concerning matters of importance to the members of the Society in general. A motion was made by Doctor Guido, and seconded by Doctor Ambrose, that two monthly meetings each year be devoted to matters pertaining to organization problems of the Society. The motion was unanimously carried. Questions of drug-store practice of medicine was considered. The question of fee schedule was discussed. It was recommended that members send suggestions to President Zumwalt concerning matters that they would like to have brought up at the next medical meeting.

IRVIN H. BETTS, *Secretary Pro Tem.*

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VENTURA COUNTY

The regular meeting of the Ventura County Medical Society was held at the Saticoy Country Club at Saticoy on Tuesday, September 13.

There were fourteen members present. The guests present were: Dr. and Mrs. John M. Askey of Los Angeles, Dr. and Mrs. Henderson and Dr. and Mrs. Markthaler of Santa Barbara, Dr. and Mrs. Harker and Dr. and Mrs. T. K. Miller of Oxnard, and Mesdames Coffey, Felberbaum, Strong, Mosher, Gronhovd, Porter, Garrett, D. G. Clark, and Morrison.

Doctor Askey addressed those present on the *Humane Pound Law.* Mrs. Henderson and Mrs. Markthaler spoke on *The Aims and Objectives of the Woman's Auxiliary.*

The names of Drs. T. K. Miller of Oxnard and James Moore of Ventura were presented for membership and their applications were turned over to the Board of Censors.

A brief report of the progress of the public Health Advisory Committee was given by the secretary. Doctor Wylie asked whether there would be any objection on the part of the Society if the Health Department made Wassermann tests on anyone who desired; these tests to be made for diagnostic purposes only, and those with positive reactions to be sent to their private physician for treatment.

* * *

The regular meeting of the Ventura County Medical Society was held at the Saticoy Country Club on Tuesday. October 11.

There were eighteen members present. The following guests were present: Dr. Arnold Kegel of Los Angeles; Drs. Daly, Fullenlove, and Witten of the County Hospital; Dr. Helen M. Bruckman of the Ventura School for Girls; Dr. R. K. Harker of Oxnard; and Dr. E. R. Cizor of Camarillo.

Dr. Arnold Kegel gave a résumé of the *Third International Goiter Conference* which was recently held at Washington, D. C.

Dr. James Moore and Dr. Theo. K. Miller were unanimously elected to membership in this Society. The names of Dr. Helen Bruckman, a transfer from Santa Clara County, Dr. Thomas M. Fullenlove, a transfer from Pike County, Kentucky, and Dr. R. K. Harker of Oxnord, a new member, were presented for the first time.

Doctor Homer made a motion that the Society go on record against the "Humane Pound Law," and that this decision be published in the various newspapers throughout the county, with the pertinent reasons on why we oppose the Initiative Act. The motion was seconded, and carried.

Announcement of the general meeting to be held at Saticoy, under the auspices of the Public Health Advisory Committee, was made by the secretary.

It was called to the attention of the members by the president that there were several insurance companies writing a broad form of health and hospitalization insurance in the county; these policies offering only a limited amount for sickness. Also that there had been several instances where the representative has attempted to force settlement for an amount less than their stipulated fees.

Doctor Homer asked what type of programs the members would like, and stated that the Program Committee would be glad to secure the type desired.

A. A. MORRISON, *Secretary.*

CHANGES IN MEMBERSHIP

New Members (69)

Alameda County

Gerald Harry Gray
Albert Miles Griffin
Vivian Hamilton
Henri A. Shefoff
Bernice I. Swenson
Ossie F. Wilmeth

Kern County

Roderick A. Ogden
Lloyd N. Tarr

Los Angeles County

Anthony Ariana
John W. Beeman
Herbert C. Behrens
Harold Carroll Bernstein
Lewis Wine Bremerman
Kenneth Allen Crimson
Isaac F. Crosby
Robert A. Cunningham
E. H. Daniels
Roderick P. Deakers
William E. Delphey
Benjamin Einhorn
R. Bruce Eldredge
John Marshall Fernald
Charles A. Gallup
Garland F. Garrett
Alvin V. Gerty
Glen Earl Glasgow
George E. Hall
Clarence M. Leggitt
James H. Macauley
Henry Joseph Magid
John G. Manning
Abner Jules Moss
Aumond D. Myers
Jesse Blain Naftzger
Arcadio Tigrio Obando
Lester A. Riskind
Julius Lewis Samuels
Nathan A. Sapiro
Adele S. Schmidt
Percy K. Telford
Stanley James Walters
Walter Williams
Ashby C. Willmott
Leon Z. Wolpe
Franklin Earl Woodhull
Warner Richard Wright
Harry Arthur Zide

Merced County

V. S. Briden
J. J. McNearney

San Bernardino County

Frances Franklin

San Diego County

Mathew Howard Ames
Ralph L. Hoffman
David A. Pohlman

San Francisco County

Earl W. Escher
Samuel A. Goldman
Albert L. Leveton
Ernest G. Lion
Peter Manjos
Roland Foster Marks
John E. Paulson
James Francis Shea
William A. Sumner
Francis E. West

San Joaquin County

Edward Faulkner

Santa Cruz County

Sheldon K. Wirt

Siskiyou County

Wilbur C. Hayden
Richard W. Jones

Stanislaus County

Ernest A. Weizer

Ventura County

James W. Moore

Transferred (2)

Everett M. Stone, from San Diego County to Riverside County.

Frederic D. Ullrich, from Riverside County to San Diego County.

In Memoriam

Abraham, Vestal Raul. Died at Los Angeles, October 10, 1938, age 53. Graduate of Rush Medical College, University of Chicago, 1913. Licensed in California in 1929. Doctor Abraham was a member of the Los Angeles County Medical Association, the California Medical Association, and a Fellow of the American Medical Association.

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Dillon, Edward Thomas. Died at Los Angeles, October 14, 1938. Graduate of the University of Southern California School of Medicine, Los Angeles, 1901, and licensed in California the same year. Doctor Dillon was a member of the Los Angeles County Medical Association, the California Medical Association, and a Fellow of the American Medical Association.

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Fredrick, Marcus White. Died at Brentwood, September 4, 1938, age 77. Graduate of the Leipzig Universität Medizinische Fakultät, Saxony, 1888. Licensed in California in 1895. Doctor Fredrick was a retired member of the San Francisco County Medical Society, the California Medical Association, and the American Medical Association.

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Jones, Wendall Ambrose. Died at Riverside, September 20, 1938, age 64. Graduate of Ohio Medical University, Columbus, 1898. Licensed in California in 1915. Doctor Jones was a member of the Riverside County Medical Society, the California Medical Association, and the American Medical Association.

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King, Joseph Millen. Died at Los Angeles, October 7, 1938, age 66. Graduate of the University of Southern California School of Medicine, Los Angeles, 1895. Licensed in California in 1896. Doctor King was a member of the Los Angeles County Medical Association, the California Medical Association, and a Fellow of the American Medical Association.

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Lepper, Lawrence Ewald. Died at Los Angeles, September 18, 1938, age 52. Graduate of the University of California Medical School, San Francisco, 1912, and licensed in California the same year. Doctor Lepper was a member of the Los Angeles County Medical Association, the California Medical Association, and a Fellow of the American Medical Association.

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Montgomery, Mary Freyer. Died at San Francisco, August 30, 1938, age 40. Graduate of the University of California Medical School, San Francisco, 1925, and licensed in California the same year. Doctor Montgomery was a member of the San Francisco County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

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Pierce, Sterling Newton. Died at Los Angeles, September 30, 1938, age 51. Graduate of the College of Physicians and Surgeons, Los Angeles, 1917, and licensed in California the same year. Doctor Pierce was a member of the Los Angeles County Medical Association, the California Medical Association, and a Fellow of the American Medical Association.

Pindler, Louis Alden. Died at Los Angeles, October 9, 1938, age 46. Graduate of New York University College of Medicine, New York, 1920. Licensed in California in 1921. Doctor Pindler was a member of the Los Angeles County Medical Association, the California Medical Association, and a Fellow of the American Medical Association.

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Wickman, Herman John. Died at Riverside, September 29, 1938, age 60. Graduate of the State University of Iowa College of Medicine, Iowa City, 1906. Licensed in California in 1923. Doctor Wickman was a member of the Riverside County Medical Society, the California Medical Association, and the American Medical Association.

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OBITUARIES

Joseph Millen King
1872–1938

At ten o'clock on Friday morning, October 7, 1938, Dr. Joseph M. King died suddenly while sitting in his automobile in front of his late residence at 1221 South Lake Street, Los Angeles. He was preparing to call upon a patient at the time. It was his sixty-sixth birthday.

To those who were intimate with him his death was not wholly a surprise, as it was known that he was suffering from coronary heart disease for several years.

Joseph Millen King was born near Bailie, Parish of St. James, New Brunswick. When he was twelve the family moved to Beaver Falls, Pennsylvania. Joseph did his premedical work at Geneva College, Pennsylvania. In 1889, with his people, he moved to San Diego County, California, where he taught school at Campo for two years. In the fall of 1892 he entered the College of Medicine, University of Southern California, graduating from the same on June 4, 1895. The school was then on Aliso Street, and the late Dr. Joseph P. Widney was the dean. Doctor King was licensed in 1896 and became a member of the County and State Medical Associations in April, 1898. He served as secretary of the County Association in 1904 and was president of the same in 1905, the youngest man who has ever been chosen to that position. He was president of the California Medical Association in 1933. He was a charter member of the Barlow Library. He was also a founder and later president of the Los Angeles Clinical and Pathological Society. During 1910 he was president of the Southern California Medical Association. He was professor of medicine during the first decade of the century at his Alma Mater while the school was on North Broadway, and was clinical professor of medicine at the time of his death. Doctor King did graduate work in medicine at

Johns Hopkins University in 1904 and at Vienna, Munich, and Berlin in 1912–1913. During the earlier years of his practice he shared offices with the late Doctors George L. Cole, Norman Bridge, H. B. Stehman, and Stanley P. Black.

Throughout his professional life Doctor King was a member of the staff of St. Vincent's Hospital. He was at one time chairman of the staff, and lectured for many years to the nurses in the training school. He was a member of the staffs of several other Los Angeles hospitals.

Doctor King led a very active life. He was an occasional contributor to periodical medical literature. He had a large private practice and was frequently called in consultation by his colleagues, who regarded him highly as an internist. Those who knew him well are proud to have been his friends. His forceful personality and sage counsel will be greatly missed by all.

E. M. Pallette
C. R. Howson

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Marcus White Fredrick
1861–1938

The San Francisco County Medical Association lost an old and respected member in the recent passing of Doctor Fredrick at the age of seventy-seven years. His death occurred on his beautiful ranch at Brentwood, where he had spent the last eight years of his life since his retirement from practice. Doctor Fredrick was born in New York City, being brought West in early childhood to spend his boyhood around Virginia City, in Nevada. He left there at the age of eleven to attend the French Gymnasium at Berlin. Returning to this country he attended the University of California and then transferred to Harvard. Receiving a degree there, he returned to Europe to study medicine in Leipzig. He received his M. D. in 1888. He remained in Berlin, studying with the famous Koch and then worked for a year in the Royal Ophthalmic Hospital, Moorfields, and the Golden Square Nose and Throat Hospital in London. In 1890 he entered upon practice in Seattle. Staying but a short while, he returned to Vienna to study the eye and ear. He then went to London to the above-mentioned hospitals as an assistant. In 1895 he came to San Francisco, starting practice in his specialty. For over twenty years he was professor of diseases of the ear in the University of California Medical School. He retired from practice in 1930, at the completion of thirty-five years of active practice in this city. During that time he was oculist and aurist in the French Hospital.

Surviving him are his wife, Mrs. Pauline A. Fredrick, his son, Captain Robert T. Fredrick, U. S. A., and a daughter, Mrs. G. R. Andrews of Stockton.

H. M. F. Behneman.

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Herman J. Wickham
1878–1938

Dr. Herman J. Wickman died at the Community Hospital on September 29, 1938, after a short illness. He was born on July 19, 1878, in New Hampton, Iowa, and was graduated from the University of Iowa, practicing there before he came to California twelve years ago. He settled in Perris and practiced there four years before coming to Riverside, where he practiced until his death.

He leaves a wife and two sons to mourn his death. In his passing, Riverside has lost a well-beloved and highly respected citizen. He was deeply sympathetic, and inspired hope and confidence in all with whom he came in contact.

The medical fraternity has lost a real friend, and he will be greatly missed in our community.

C. R. Geith
A. W. Walker

Wendall A. Jones
1874–1938

The passing of Dr. Wendall A. Jones came as a great shock and brought sadness to the hearts of all who knew him. Doctor Jones was born in Illinois on August 12, 1874, and died on September 20, 1938. He was graduated from the Ohio Medical University in 1898. He practiced in Ohio sixteen years before coming to Riverside. He served eighteen months in the Spanish-American War in the Philippines, and twenty-three months at Camp Kearney during the World War, later going to France. In 1922 he was appointed medical superintendent of the Riverside County Hospital on part time, holding this position for two years. In January, 1935, he was appointed full-time County Health Commissioner, holding this position until his death.

In many homes his kind ministrations during the hours of sickness and sorrow made him beloved by his fellow men. He went through life with the constant thought to do humbly and efficiently his work as a true practitioner. He was beloved for his gracious courtesy and broad tolerance of the views of others. He will be greatly missed in our community and especially to all members of the medical profession who knew him. He leaves a wife and four daughters and a brother to mourn his death.

C. R. Geith
A. W. Walker

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Mary F. Montgomery
1898–1938

A brilliant, searching mind ceased its many activities in the field of medicine in the recent tragic passing of this young colleague. Cut down at the young age of thirty-eight, with a promising career ahead, knowing for some time of her inevitable end, she maintained a remarkable philosophy and stoicism. Doctor Montgomery was graduated academically and medically from the University of California, interning at the San Francisco Hospital, and spending three years in Salt Lake City practicing internal medicine. Restless in the routine of practice, spurred on by an investigative mind, she turned to research because of its intellectual stimulus. In 1931 she received her Ph.D. in physiology at the end of her work with Doctors Carlson and Luckhardt of Chicago. Doctor Montgomery was assistant clinical professor of surgery at the University of California Medical School at the time of her death. Her outstanding work, aside from practice, was in the field of the function and control of the mucous glands of the mouth. This led to further valuable study on many aspects of the function of the salivary glands. She did extensive work on the effects of the barbiturates on bodily function, as well as the effect of large doses of irradiated ergosterol upon blood chemistry.

Her avocation was painting and music. She turned to the former in the last years of her life. Her passing on August 30 ended the needed activities of a brilliant student and truly scientific mind. I wish there were room here to print even a tenth of the eulogies given to me by the innumerable friends who remain to hold her in admiring and loving memory.

H. M. F. Behnemann.

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Sterling N. Pierce
1887–1938

An obituary notice of the usual type cannot be adapted to fit the present needs. No formal phraseology is adequate to describe the life of Sterling Pierce, and no stilted expressions of sympathy can picture the widespread heartbreak at his untimely death.

The son of a pioneer Los Angeles family, his preliminary and medical education was acquired in his native state. After graduation from the University of Southern Cali-

fornia, and internship at the Los Angeles County General Hospital, he allied himself with the Medical Corps of the Navy, in which thereafter he maintained a Reserve commission. Following the hostilities he set himself earnestly to the acquirement of a broad obstetrical training. To this end he spent considerable time at the Chicago Lying-In Hospital, where he served as resident, and in several foreign centers. Throughout his activities the influence of Doctor deLee was readily discernible, for Sterling was an enthusiast in the use of local anesthesia and his skill in the handling of this agent was remarkable. Always willing to adopt new procedures and, if they proved satisfactory to his critical observation, then to advocate them with great enthusiasm. His was not an unconsidered effervescence but rather an appreciation of logical innovations. As an example. his adroitness with Kielland forceps was developed only after long and careful study. Only perfection in technique could satisfy him.

Of a highly critical nature, his criticism was directed chiefly at himself, almost never at others. Where his correction was necessary, Sterling usually pointed out the proper procedure by recounting a real or fanciful similar experience, and his instruction thus was absorbed without rancor. His willingness to extricate his fellow practitioners from their obstetrical difficulties was known to all. It is safe to say that few gave more fully of their time and of their abilities to others of the medical profession, and his usual response to any proffer of recompense was a bluff assertion that he really had done nothing.

His greatest joy, aside from the problems of practice, was obtained from hunting. The opening of the dove or deer season usually found Sterling afield. It is, therefore, peculiarly fitting that his remains are now interred at Hemet, near the woods and fields over which he had tramped so happily.

It is difficult to realize that no longer will his hearty chuckle echo through the corridors, difficult to adjust ourselves to his departure—yet, in the broadest sense, he is not gone, for his life lives in the hearts of his family, in the lives of literally hundreds of children whose safe delivery he accomplished, and in the memories of us—his friends.

WILLIAM BENBOW THOMPSON.

✝

William W. Wymore
1866–1938

"Sometimes death is a punishment; often a gift; it has been a favor to many." To William Watson Wymore it recently brought surcease from pain, and terminated some months of illness.

Doctor Wymore was born and reared in Grass Valley, and, like many another of his time, worked hard at various tasks, with the goal of medicine ever ahead. Born in 1866, he was graduated from Cooper Medical College in 1895 and was licensed to practice that year. He continued for many years his anatomical teachings there, having been one of the original demonstrators of anatomy. Old Doctor Lane was the embodiment of Hippocrates to Wymore; he was a devoted disciple.

He, like other members of the "old guard" who survive him, started practice in the Mission district. Lifelong friendships with Doctors Graves, Coffey, Austin, and Gallwey arose from this early association. He was an early member of the Board of Health. He was instrumental in having Doctors Geiger and Wilbor appointed to the positions they hold today.

During his entire life he was the "family doctor," and did a great deal of surgery and obstetrics.

Dignified but genial, quiet but quick at repartee (which he loved), he enjoyed, as did his friends, a great sense of humor.

As he lay these last months, thinking, as doctors must at the end of the trail, we hope he found solace in the knowledge of his great unselfishness. Patients came first, but all his life he was a friend of the young graduate. Quietly, but successfully, he always seemed to have the time, the interest, and the right berth for the right man.

Thus, more than one generation is grateful to him and mourns his passing.

H. M. F. BEHNEMAN.

THE WOMAN'S AUXILIARY TO THE CALIFORNIA MEDICAL ASSOCIATION †

MRS. CLIFFORD A. WRIGHT.....President
MRS. FRED H. ZUMWALT.....Chairman on Publicity
MRS. FRANK H. RODIN..Assistant Chairman on Publicity

Component County Auxiliaries

Alameda County

Mrs. Frank Baxter presided at the luncheon meeting of the Woman's Auxiliary to the Alameda County Medical Association on Friday, October 21. About one hundred members were present.

A program of unusual interest was presented. Mrs. Elizabeth Lossing, police woman and head of the crime prevention division of the Berkeley Police Department, spoke on *Protective Worw with Girls.* Mrs. Lossing has been in charge of this work since its inception in 1925.

Miss Martha Tabb, gifted young cellist, played two numbers, accompanied by Mrs. Louis Henry Dyke, a member of the Auxiliary.

The hostess of the day was Mrs. Robert Sutherland, past president, and Mrs. LeRoy W. Hahn was chairman of reservations.

An enthusiastic and loyal group of members, headed by Mrs. Kenneth Neilsen, have been working with outstanding success for the Community Chest campaign.

MRS. GRANT ELLIS, *Publicity Chairman.*

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Marin County

The Woman's Auxiliary to the Marin County Medical Association met for dinner at the Marin County Golf and Country Club at 6:30 p. m. on Thursday, September 22. Due to illness, the president, the first and second vice presidents were unable to preside, therefore the secretary, Mrs. Harry Hensler presided.

Mesdames Clifford A. Wright, state president, E. Eric Larson, state secretary, and Fred H. Zumwalt, state publicity chairman, were the honored guests.

After dinner a short business meeting was held. Ways and means for increasing the Auxiliary treasury were discussed.

Mrs. Robert Furlong, program chairman, introduced the guests, who spoke informally to the members. Interest in present legislative measures was emphasized. Plans for the organization and future programs were outlined.

MRS. E. DELANCEY, *Publicity Chairman.*

† As county auxiliaries of the Woman's Auxiliary to the California Medical Association are formed, the names of their officers should be forwarded to Mrs. Frank H. Rodin, Assistant Chairman of the Publicity and Publications Committee, 2457 Bay Street, San Francisco. Brief reports of county auxiliary meetings will be welcomed by Mrs. Rodin, and must be sent to her before publication takes place in this column. For lists of state and county officers, see advertising page 6. The Council of the California Medical Association has instructed the Editor to allocate two pages in every issue to Woman's Auxiliary notes.

Merced County

The first meeting of the year of the Merced County Auxiliary was held on September 22 at the Hotel Tioga, at the dinner hour. The president, Mrs. Ed Soderstrom, presided. Twelve members were present, including three new members.

After dinner the goal for the year's undertaking was discussed. It was agreed that magazines, cards, and handicrafts be placed in the tuberculosis and children's wards of the county hospital.

A benefit bridge dessert was held on October 12 at the Woman's Club House to raise funds to help carry on the year's program.

MRS. MAX BRANNON, *Publicity Chairman.*

Orange County

The Orange County Auxiliary met for luncheon on October 4 at Daniger's Tea Room in Santa Ana. The new president, Mrs. Hiram Currey, presided and greeted all the members and guests.

Mrs. K. H. Sutherland presented Dr. W. W. Roblee, President of the California Medical Association, who gave an informative talk on *Modern Trends in Medicine.* Doctor Roblee urged special attention to legislative problems, to study bills and amendments in order that members may be able to inform others of the difference between legislation good or bad for public health.

Mrs. Roblee was introduced and in response invited the members to visit the Riverside County Auxiliary.

Committee chairmen reported on the year's outlines, and the membership chairman reported eleven new members had expressed the desire to join the Auxiliary.

MRS. G. WENDELL OLSON, *Publicity Chairman.*

San Diego County

The first fall meeting of the Woman's Auxiliary to the San Diego County Medical Society was held at 12:30 p. m. on September 13, in the House of Hospitality, Balboa Park. There were forty-four members present.

This meeting was arranged as a social function making it possible for all members to become better acquainted. After luncheon some enjoyed bridge and others knitted, and all spent a very pleasant afternoon.

MRS. H. K. ALBERTSON, *Publicity Chairman.*

Santa Clara County

On September 19, the spacious home of Mrs. Russell V. Lee, on the Stanford campus, was the setting for a delightful tea given in honor of Mrs. Clifford A. Wright, President of the Woman's Auxiliary to the California Medical Association, and her corresponding secretary, Mrs. E. Eric Larson. The officers and board of directors of the Santa Clara County Auxiliary were the hostesses. About fifty members were present to greet the distinguished visitors.

Mesdames John Hunt Shepard and Philip Wise presided at the beautifully appointed tea table, which was decorated with bright autumn flowers. Many pretty floral decorations throughout the house reflected the autumn season.

Mrs. Wright spoke briefly on the purposes of the Auxiliary, the ideals for which we must strive, and offered her help and advice at all times.

Mr. Clark Cypher, attorney from Palo Alto, gave a short talk on Bill No. 2, the Humane Pound Act, which will appear on the November ballot, urging all to work unceasingly against it.

The first regular meeting of the Santa Clara County Auxiliary was held on October 3 at the Leon Ghetti Tea Room near Los Gatos. Mrs. M. D. Baker, president, presided, with about thirty members present.

After luncheon, Mrs. Russell V. Lee, program chairman, introduced the speaker, Mr. Adron Beene, whose subject was *Medical Legislation.* He spoke of the need to sponsor good health laws and work against those which would be detrimental to the health of the public.

Mrs. Baker asked for volunteers for the Community Chest campaign and to assist the Santa Clara County Tuberculosis Society to reorganize the files of the mailing list for the distribution of Christmas Seals.

MRS. CHARLES MOORE, *Publicity Chairman.*

Infectivity of Calcified Tuberculous Lesions.—Whether or not calcified foci from childhood infections with tuberculins are possible sources of endogenous reinfection in later life has been a disputed question for a half century. In 1884 Dejerine studied calcified lesions in twelve tuberculous persons dying in the fourth, sixth, seventh, and eighth decades of life. He failed to find tubercle bacilli in the calcified lesions. Material from four of these lesions was injected into guinea pigs with uniformly negative results. From these scanty data Dejerine concluded that the infectious agent disappears quantitatively from tuberculous lesions as soon as calcification is complete. Quite different results were subsequently reported by Rabinowitsch, Schmitz, and others, who tested the guinea pig infectivity of thirty-two calcified foci from human necropsies and obtained positive results in seventeen cases.

Doubt as to the reliability of previous conclusions was afterward expressed by Griffith, who found that in 176 trials chronic tuberculous tissues failed to infect guinea pigs, although acid-fast bacilli were readily demonstrated by animal inoculation. By animal inoculation Opie and Aronson demonstrated tubercle bacilli in apparently noninfected portions of tuberculous lungs, suggesting that the alleged infectivity of calcified foci was due to slips in technique or unavoidable contamination of the calcified area.

Since there is at present no unanimity of opinion as to the probable infectivity of chronic tuberculous lesions, Feldman and Baggenston of the Mayo Clinic restudied this problem with the latest technical methods. Necropsy material was obtained from sixty-eight persons ranging in age from seven to ninety years who had died from causes other than tuberculosis. Evidence of previous pulmonary infection with tubercle bacilli was observed in all cases, the presumptive childhood tuberculosis appearing as encapsulated, caseous or calcified areas in the pulmonary tissues or the tracheobronchial lymph nodes. These encapsulated lesions were excised and emulsified in sterile sand and the emulsions thus obtained planted on two or more particularly favorable culture mediums. From two to six duplicate guinea pigs were inoculated subcutaneously with 1 to 2 cubic centimeters of each sample. All animals that died within twenty-one days were discarded, death presumably being due to primary or allergic toxicity of the emulsion or to nontuberculous virus or bacterial infection. The surviving guinea pigs were killed at the end of from eight to fourteen weeks and meticulously examined macroscopically, microscopically and culturally for evidence of tuberculosis.

Positive results were obtained in only one of the sixty-eight chronic tuberculous foci studied. In none of the other foci was the presence of tubercle bacilli demonstrated by either cultural or inoculation methods. The authors concluded from this evidence that in the majority of cases the "primary complex" in tuberculosis passes through an involutional process unfavorable to the continued viability of Mycobacterium tuberculosis. In their opinion endogenous reinfection from definitely capsulated, sclerotic, caseous or calsified tuberculosis of childhood is unlikely to occur.—*Journal of the American Medical Association,* August 20, 1938.

MISCELLANY

Under this department are ordinarily grouped: News Items; Letters; Special Articles; Twenty-five Years Ago column; California Board of Medical Examiners; and other columns as occasion may warrant. Items for the News column must be furnished by the fifteenth of the preceding month. For Book Reviews, see index on the front cover, under Miscellany.

NEWS

Coming Meetings

American Medical Association, St. Louis, Missouri, May 15 to 19, 1939. Olin West, M. D., Secretary, 535 North Dearborn Street, Chicago, Illinois.

California Medical Association, Hotel Del Monte, May 1 to 4, 1939. George H. Kress, M. D., Secretary, 450 Sutter Street, San Francisco.

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Pacific Coast Society of Obstetrics and Gynecology, Los Angeles, November 30 to December 3. T. Floyd Bell, M. D., Secretary, 400 Twenty-ninth Street, Oakland.

Western Surgical Association, Omaha, December 2 to 3. Albert H. Montgomery, M. D., Secretary, 122 South Michigan Boulevard, Chicago.

Medical Broadcasts*

Los Angeles County Medical Association

The radio broadcast program for the Los Angeles County Medical Association for the month of November is as follows:

Thursday, November 3—KECA, 10:45 a. m., The Road of Health.
Saturday, November 5—KFI, 9:00 a. m., The Road of Health; KFAC, 11:30 a. m., Your Doctor and You.
Thursday, November 10—KECA, 10:45 a. m., The Road of Health.
Saturday, November 12—KFI, 9:00 a. m., The Road of Health; KFAC, 11:30 a. m., Your Doctor and You.
Thursday, November 17—KECA, 10:45 a. m., The Road of Health.
Saturday, November 19—KFI, 9:00 a. m., The Road of Health; KFAC, 11:30 a. m., Your Doctor and You.
Thursday, November 24—Thanksgiving Day.
Saturday, November 26—KFI, 9:00 a. m., The Road of Health; KFAC, 11:30 a. m., Your Doctor and You.

San Diego County Medical Society Postgraduate Conference in Gynecology.—The Conference was conducted by a local committee, in conjunction with the Committee on Postgraduate Activities of the California Medical Association, on October 17, 18, 19, and 20. The program follows:

October 17, Mercy Hospital—Menstrual Disorders, Dr. Daniel G. Morton, Associate Professor of Obstetrics and Gynecology, University of California.

October 18, Red Cross Building, Naval Hospital—Cancer: Cervix and Uterine, Doctor Morton.

October 19, University Club—Pelvic Infections: (1) Obstetrical Infections, Dr. William Benbow Thompson, Los Angeles. (2) Gynecological Infections, Dr. Erle Henriksen, Los Angeles. Dinner 6:30 p. m. $1.00.

October 20, Mercy Hospital—Benign Lesions and Uterine Tumors, Dr. Donald G. Tollefson, Assistant Professor of Obstetrics and Gynecology, University of Southern California.

* County societies giving medical broadcasts are requested to send information as soon as arranged (stating station, day, date and hour, and subject) to CALIFORNIA AND WESTERN MEDICINE, 450 Sutter Street, San Francisco, for inclusion in this column.

"Fortune's" Article on the "American Medical Association."—On October 27 the November issue of *Fortune* will be released. A box caption, in referring to its article on the American Medical Association, states:

"The businessman is not the only one with a government problem on his hands. The doctor also has that particular headache and has not yet learned how to cure it. Herewith is the story of the embattled American Medical Association and the dramatic social and political issues with which it is now confronted."

Members who are interested in organization work may wish to read the article.

President Sproul Urges the Defeat of Pound Bill at Election.—Strongly urging the defeat of the so-called State Humane Pound Act, President Robert Gordon Sproul of the University of California has written the California Society for the Promotion of Medical Research, terming the proposed act a definite and continuing obstacle to the conservation and increase of the minds and bodies of the people of the state. President Sproul said:

"It is my hope that the efforts of the California Society for the Promotion of Medical Research to make public the dangers of the proposed State Humane Pound Act will lead to its overwhelming defeat by the voters of California.

"It is obvious that the passage of this bill will increase the cost of necessary disease prevention and control by authorized research centers. At a time when the tax burden for public welfare activities is a real problem to the average citizen this fact cannot be dismissed too lightly. But adding unnecessary costs to health protection is only one of many faults in the provisions of the proposed pound law.

"The real objection to the bill is that it attempts to enact antivivisection legislation which the people and the legislature have already refused to accept, by concealing its real purpose under a cloak of sentiment. Every dog owner, including myself, is ready to do everything to protect these friends of mankind from needless exploitation. But the proposed bill appears to be less concerned with the protection of dogs than it is with handicapping medical progress.

"If the Pound Act were to be passed, the University of California and other research centers would be faced with the choice of giving up many studies aimed at the improvement of health and the increase of happiness for animals as well as human beings, or of going into the business of raising laboratory animals on breeding farms. Certainly, the bringing of more dogs into the world when so many are already wandering about without owners or homes is not progress.

"On the other hand, the abandoning of research into the disease origins of preventable suffering and death would be a calamity for mankind as well as a betrayal of the responsibility which mankind has assumed for the welfare of the animals which it has domesticated. There is nothing more basic to improvement of human and animal welfare than the control and prevention of disease. The future of civilization, spiritually as well as materially, depends upon the thinking of healthy minds and the action of healthy bodies. To the conservation and increase of such minds and bodies the State Humane Pound Act would be a definite and continuing obstacle."

Pan-Pacific Surgical Association.—The third congress of the Pan-Pacific Surgical Association will be held in Honolulu on September 15 to 28, 1939.

This will be the third meeting of the Pan-Pacific Surgical Association, the two former ones having been held in 1929 and 1936, also in Honolulu. An invitation is extended to all surgeons of the California Medical Association to meet, in Honolulu, outstanding men from countries of the Pacific area, including Australia, New Zealand, China, Japan, Java, Canada, and the United States, for an interchange of surgical thought and for the purpose of bringing about better understanding through personal contact among the surgeons of these countries.

There will be sections in fractures and orthopedics, general surgery, gynecology, motion pictures, neurosurgery, ophthalmology, otolaryngology, roentgenology, plastic surgery, thoracic surgery and neurology—all headed up by outstanding men as chairmen for the United States and equally prominent men as chairmen for the Australasian section. The Congress affords not only participation in interesting scientific papers, but a very enjoyable vacation in the "Paradise of the Pacific."

Communications for information should be directed to Dr. George W. Swift, 902 Boren Avenue, Seattle, past president of the Association; Dr. Frederick L. Reichert, Stanford University Hospital, San Francisco, program chairman for the United States; Dr. Howard Updegraff, 6777 Hollywood Boulevard, Los Angeles, program vice-chairman; or Dr. Forrest J. Pinkerton, secretary-treasurer of the Association, Young Building, Honolulu, Hawaii.

"March of Life" Is Medical School Display for 1939. How medical science has turned aside the stream of plagues, disease, childbirth suffering, and accident mortality, is to be displayed in a sixteen-unit exhibit by the University of California as part of its participation in the Golden Gate International Exposition in 1939. The display, which has been titled "The March of Life," will give visual proof of what medicine and surgery have accomplished since the time of Hippocrates, father of the healing arts. While it will show something of the inroads of disease, chief emphasis will be placed on prevention and cure.

With Dr. Karl F. Meyer, director of the Hooper Foundation for Medical Research, as the chairman of the exhibit committee, and Dr. Langley Porter, dean of the University's medical school, directing the enterprise, the exhibit is rapidly assuming shape and form.

Unit No. 1 will itself be titled "The March of Life," with a series of thirty-five transparancies showing the history of the individual from the prenatal period to old age, with the various bodily changes involved. The second will contain a key index and general descriptive panel which will describe the whole exhibit in detail. The third will deal with the animal kingdom, showing how animals are both the friend and foe of man. This will consist of a large painting 11 feet wide and 7 feet high, illuminated from behind, and emphasizing particularly the processes of disease transmission. The fourth unit will show the prenatal period of human life. The fifth, sixth, and seventh will deal with the diseases of children and their prevention, while the eighth will compare growth changes through childhood to adolescence. The ninth will depict the healing mysteries and near miracles of surgery, while the tenth and eleventh will feature the place of the physician in the scheme of life and some of the diseases that he has conquered.

The twelfth unit will be given over to a display on arthritis, illustrated by colored lantern slides. The thirteenth will deal with the right and the wrong way of arriving at old age. The fourteenth will show the percentage shifts in population between people of various ages. The fifteenth will be a display covering nutrition, both good and bad, while the sixteenth will demonstrate the services rendered by the University's medical center to its own students.

Cancer Commission Pathological Conferences.—The next Microscopic Conference of the Cancer Commission of the California Medical Association will be held in the Science Building at the University of Southern California Medical School, University Avenue and Thirty-sixth Place, Los Angeles on Sunday, December 18, at 9:30 a. m. The following announcement has been received from Dr. Otto H. Pflueger, Secretary of the Cancer Commission of the California Medical Association, the roster of whose members is printed in each issue of CALIFORNIA AND WESTERN MEDICINE, on advertising page 2.

"In order that the committee in charge of the Conference—Dr. A. G. Foord, Dr. Newton Evans, and Dr. E. M. Hall—may go over the cases that are suitable, we are asking that, if you have a case which you would like to present, you send in two or three sample slides and a case history for the Committee's perusal as soon as possible.

"If a case is accepted, the Committee will notify you and ask that you make up a set of fifty slides for distribution. The Committee is particularly anxious to obtain slides which are made of properly fixed material, so that the slides will be satisfactory for diagnosis.

"We are particularly interested in getting the cases ready several weeks before the meeting, and would appreciate receiving sample slides and histories by the middle of November. We feel that if slides can be sent to the pathologists throughout the state two weeks before the meeting, the cases can be diagnosed more satisfactorily and the discussion will be much more interesting.

"Kindly send your preliminary histories and slides to the Chairman of the Committee, Dr. A. G. Foord, Huntington Memorial Hospital, 749 Fairmont Avenue, Pasadena. He will get in touch with you concerning the cutting of fifty sections if your cases are accepted."

Disasters Caused by Man Are Worst of All.—Sudden disasters, such as earthquakes, hurricanes, great fires and tidal waves do not drag after them the serious problems of large-scale malnutrition that are occasioned by the man-made disasters of deforestation and soil erosion.

This was stated by Dr. Alfred C. Reed, Professor of Tropical Medicine in the Hooper Foundation of the University of California, in a recent address before the Third International Congress of Tropical Medicine and Malaria, meeting in Amsterdam, Holland. Doctor Reed is president-elect of the American Society of Tropical Medicine, and will assume the presidency at the annual meeting of the Society in Oklahoma City, Oklahoma, on November 14–17.

Doctor Reed states that every migration is related in some way to nutritional needs, even those occasioned by differences in religion, political and intellectual persecutions, and in the lust for simple conquest and power.

"The chief causes of population movements are essentially economic." Doctor Reed told the Congress. "These economic causes become objective and operative in various forms, chiefly in the form of interference with food supply. The great age of exploration in the sixteenth century was motivated by the need for spices to relieve the monotonous dietary of Europe. Interference with food supply is usually based on climatic change (historically), on political conditions, on the devastations of war and natural disaster, and on population pressure.

"War is the worst enemy of all for overpopulation unless one accepts an ideology entirely foreign to sound scientific method and social rights. There seems but one other method of control in case population density is to be scientifically correlated with available food supply. That is birth control. It must not be overlooked that at least a partial solution of the problem can be found in scientific elimination of the burden of the socially and mentally unfit, the confirmed criminals, and the insane. Size of any biologic unit—in this case a race or a nation—is no criterion of desirability. Quality and not quantity must be the goal."

Stanley P. Black Memorial Lectures.—The 1938 lecture was given in the Stanley P. Black Memorial Hall, 65 North Madison Avenue, Pasadena, on Tuesday, October 11, at 8:15 p. m.

The topic, "The Differential Diagnosis of Cardiac Pain, Including that Due to Coronary Occlusion," was presented by Dr. Frank N. Wilson, Professor of Internal Medicine, University of Michigan Medical School, Ann Arbor, Mich.

Southern California Medical Association.—The ninety-ninth semi-annual meeting of the Southern California Medical Association was held at the headquarters of the Los Angeles County Medical Association, 1925 Wilshire Boulevard, Los Angeles, on Friday and Saturday, October 28 and 29. As guest speaker the Association secured Dr. Lloyd H. Ziegler, Associate Medical Director, Milwaukee Sanitarium, Wauwatosa, Wisconsin. Doctor Ziegler was formerly professor of neurology and psychiatry at Albany Medical College.

Black Widow Spider Control Is Discovered.—A lizard, known popularly as the San Diego alligator lizard, has been found to be a biological control for the dread black widow spider. Dr. Raymond B. Cowles, zoölogist on the Los Angeles campus of the University of California, has made a study of the problem of black widow spiders, and has found that the San Diego lizard destroys both spiders and their eggs as quickly as it can find them.

"There are many reports that the black widow spider is increasing," said Doctor Cowles. "There is no way to verify this statement since there has never been any count of the spider. A few years back there were a great many of the spiders to be found about my own home. I introduced a number of the San Diegan lizards, and it was not long until I found it almost impossible to discover a single black widow anywhere about my place.

"This lizard is harmless in so far as human beings are concerned, and if we could introduce and protect them in reasonable numbers, then the black widow would become very difficult to find. But the common house cat preys upon the lizards about as avidly as the lizard preys upon the spiders."

Pound Act Would Be Hopeless Handicap to Science. "There is no way in which biological and medical research departments of the University of California can meet the provisions of the proposed State Humane Pound Act which will appear on the November ballot without greatly increasing the cost of public welfare activities and seriously handicapping efforts to protect public health."

This conclusion was reached today by a committee of scientists of the University under the chairmanship of Dr. Karl F. Meyer, Director of the Hooper Foundation for Medical Research, following study of the provisions of the Act, and conferences on ways and means of meeting them.

Doctor Meyer states that in the considered judgment of the committee, whatever benefits the Act may have been designed to bring will be far outweighed by disadvantages which involve the health and happiness of the entire state.

Public announcement of these findings, Doctor Meyer added, is felt to be a duty of the committee, inasmuch as the inclusion of the word "Humane" in the title of the Act will undoubtedly incline voters who are unfamiliar with the dangers of the law to vote for it. It is believed that the great majority of voters, once they are cognizant of the facts, will vote "No."

"If the State Humane Pound Act were to be passed," members of the committee point out, "biological and medical research centers would be obliged to abandon animal studies for the control and prevention of diseases of mankind and of farm stock and pets, or to go into the difficult and expensive business of breeding animals for that especial purpose. When thousands of uncared for and unwanted animals are already roaming about, frequently in a half-starved condition, and public funds must be spent to dispose of them, it is neither logical nor humane to bring more animals into the world at additional cost."

Facts gathered by the committee show that the present ability of veterinarians to care for the sickness and suffering of pets, and the success of the medical profession in raising the average longevity of American citizens from forty years to sixty years in two generations, is based, in the last analysis, upon the type of investigations which the State Humane Pound Act would make difficult or impossible. For this reason citizens are urged to vote "No" on the State Humane Pound Act.

Stable Fly Theory of Poliomyelitis Due for Revival. The theory, advanced years ago, that the stable fly or some other insect may carry the causative organism or factor of poliomyelitis, or infantile paralysis, is due for revival by science in the light of studies made within the past decade. This is stated by Dr. L. L. Lumsden, Director of the United States Public Health Service for the New Orleans area, who is at the University of California to deliver a series of lectures on epidemics and epidemiology.

The facts on which the insect hypothesis is based are that the disease has a higher incidence in the rural areas, proportionately speaking, and it usually occurs at the season of highest incidence of intestinal infectious diseases. The possibility of a lower animal reservoir should also be entertained, but more work is needed at once on the stable fly and other types of biting insect, Doctor Lumsden said.

The fact that the disease in its epidemic form tends to confine itself to certain areas, has also called for much speculation regarding local causative factors, he said. Undoubtedly many human beings in these areas who might be considered as carriers have traveled to other points without spreading the disease. In some of the earlier studies scientists were able to transmit a form of the disease to monkeys from the stable fly, but these cases were so few that the fly theory was finally discarded as untenable.

The San Joaquin County public health district, the objective of a number of ranking medical men throughout the country, was declared by Doctor Lumsden to be one of the finest of its type in the United States. Together with a number of the members of his lecture classes, Doctor Lumsden visited Stockton to confer with the officials of the district. The district rather than county organizations in San Joaquin County allows of a particularly effective health set-up, he said.

First Tests Made on New Medical Cyclotron.—The medical cyclotron, huge peace-time engine of healing elemental forces, being reared by the University of California to fight for the preservation and protection of human health and happiness in the midst of war alarms, is doing its first experimentation. While not yet fully geared and ready to produce the radio-active substances that science is to use in an enlarged and intensified campaign against many diseases, it can receive and engender certain magnetic energies useful in the field of physics. It still lacks the vacuum chamber and target chamber which will figure later in production of the radio-active substances to be used in widespread treatment of disease, but enough of the mechanism has been assembled to enable Dr. Francis A. Jenkins, Associate Professor of Physics, to make further determinations on the splitting of spectroscopic lines in the magnetic field. Thus Doctor Jenkins becomes the first to employ the new cyclotron experimentally, and its performance is being watched with keen interest by the whole world of science.

It is expected that the cyclotron will not be in full operation for four or five months, but, in the meantime, much

preparatory work is being done against the time when the great 225-ton engine will begin its atom-smashing, or, in other words, its "clinical" career. In one phase of this preparatory work, Dr. A. Marshak of the John Simon Guggenheim Memorial Foundation, New York, is experimenting with both x-ray and with neutron rays from the University's present cyclotron to make a comparison of the effect of both types of irradiation on both plant and animal chromosomes. The knowledge of such reactions may give more information on the functions of chromosomes, but the first determination that this scientist is seeking concerns the variability and sensitivity of these cell factors and their response to both types of irradiation. In this way it is hoped to determine what radiation dosages could be used with the cyclotron to get comparable effects in chromosomes of different subjects.

Great impetus has been given this work by the installation of a 220,000-volt x-ray machine by the General Electric Company. This has its own cubicle in the new radiation laboratory, set some distance from the cyclotron room, but within easy reach of the larger engine. The x-ray room contains the latest mechanism for measuring dosages, and should play a big part in making exact comparisons between neutron and x-ray irradiation.

San Francisco Heart Committee.—The San Francisco Heart Committee of the San Francisco County Medical Society will hold its Ninth Annual Postgraduate Symposium on Heart Disease on November 15, 16, 17, 1938. Sessions will be held at San Francisco Hospital, Stanford University Hospital, University of California Hospital, and Laguna Honda Home.

The registration fee is $15, which includes membership in the California Heart Association, and a syllabus of the symposium. Registration closes on November 9, 1938, at the office of the San Francisco Heart Committee. Doctors registering after that date are asked to report for registration at the University of California Hospital, Third and Parnassus avenues, on Tuesday, November 15, between 8:30 and 9:30 a. m.

The morning meetings will be devoted to study groups limited to five or ten doctors. A number of these sections will be held each morning at the various hospitals.

The morning sessions will include demonstration of patients presenting problems in heart disease, evaluation of specific diagnostic procedures and therapy, differential diagnosis, and treatment. Opportunity will be given for questions and discussion, and for personal examination of the patients who are presented.

General sessions will be held each afternoon. On Tuesday afternoon the meeting will take place at Stanford University Hospital at which time the diagnosis and treatment of heart irregularities will be discussed.

On Wednesday afternoon problems in degenerative heart disease will be the subject for consideration at the University of California Hospital.

The subject for the Thursday afternoon session at San Francisco Hospital will be therapy of heart failure.

General sessions will also be held each evening. Technical demonstrations in heart disease are included in the Tuesday evening program at the University of California Hospital and Stanford University Hospital. The Wednesday evening meeting will be a public health meeting on heart disease, with Dr. J. C. Geiger presiding. This meeting will be held at the Veterans' Auditorium. It will be an open meeting, to which the public is invited.

Special plans for the closing session on Thursday evening, November 17, are being arranged. This will be a dinner meeting at which all doctors who have registered for the symposium will be guests of the Heart Committee.

The program for the symposium is being arranged by Doctors John J. Sampson (chairman), Walter H. Brown, Richard D. Friedlander, Gordon E. Hein, William J. Kerr, William W. Newman, J. Marion Read, and William P. Shepard.

A copy of the program will be mailed to you on request. Address application for registration to Dr. William W. Newman, Secretary, San Francisco Heart Committee, 604 Mission Street, Room 802, San Francisco.

Press Clippings.—Some news items from the daily press, on matters related to medical practice, follow:

Chiropractic Defined

Court Limits Its Scope

Boundaries within which the system of Chiropractic can be practiced were defined yesterday in a ruling by Superior Judge Van Nostrand.

Ruling on a definition suit of the California chiropractic act brought by M. James McGranaghan, attorney-chiropractor, Judge Van Nostrand decided:

"Chiropractors are limited to the manual adjustment of subluxations and misalignments of the segments of the spine when such subluxations and misalignments cause occlusions of nerves and interference with the transmission of nerve force at or within the spinal column."

Any other practices or measures, the court ruled, are exclusively within the scope of physicians, surgeons or osteopaths, and it is unlawful for chiropractors to indulge in them.

So long as they do not violate provisions of the State medical act, osteopathic act or dental act, chiropractors can employ the use of "chiropractors' tables, hammers, towels, etc.," the court ruled.—San Francisco *Chronicle*, October 7.

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Migrant Camps Plan Advanced

Grand Jury Proposes Restricted Areas as Sanitation Measure

Bakersfield, Oct. 3.—(Exclusive)—Recommendation by the Kern County Grand Jury for migratory workers to be required to live in limited camping areas was made to the Kern Board of Supervisors today.

The grand jury advocated establishment of county camps similar to the Federal camps at Shafter and Arvin. In event that the Federal government does not set up more of these camps here, the grand jury recommends the county establish such camps at Rockpile, Mountain View, Delano and McFarland areas for three hundred families each.

The purpose of these supervised camps would be to prevent sporadic bivouacs and insanitary conditions attending such practices in other sections of the county. The agricultural laborers are needed to harvest seasonal crops, the report stated.

A charge of 10 cents per day would be made for camping privileges and four hours' work per month for each man in camp, which would provide tents, showers and washing equipment.—Los Angeles *Times*, October 4.

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Yuba Medical Office Extends Service to Seven Counties

Marysville (Yuba County), Oct. 11.—The Agricultural Workers Health and Medical Association office here today took over the work of seven Superior California counties with the closing of the Woodland, Yolo County, office.

Miss Gwendoline Harris, in charge of the Marysville office, said an additional full time clerk will be placed here and that the combined offices will care for the medical needs of agricultural workers in Yuba, Sutter, Butte, Colusa, Glenn, Yolo, and Sacramento counties.

633 Patients are Aided

Previously the Marysville office covered Yuba, Sutter and Butte counties and portions of Colusa and Glenn counties.

Since its establishment here last June the association, financed through federal funds, has given medical assistance to 633 patients.

Exclusive for Workers

The aid is exclusively for agricultural workers and their families who have been residents of the State for less than a year. Patients are not obligated to pay for medical, dental treatment, hospitalization or drugs, but may pay the costs at such time as they are able.

The local office has a panel of forty-two physicians and dentists who give treatment in their individual offices and who are paid fixed fees by the association.—Sacramento *Bee*, October 11.

A Good Work

The Agricultural Workers Medical and Health Association organized to care for migrants in California, reports eight hundred cases of malarial fever discovered and treated in migrant camps during the early fall. The disease, instead of developing into epidemic proportions, was controlled within three days.

In all, 5,888 individuals were aided, showing that more than three thousand families were dependent upon the association for medical care.

What a plight these migrant workers would be in were it not for the provisions that assure them adequate medical attention. And how disastrous it might be if an epidemic broke out in one of the camps and spread to nearby communities!

The medical association is performing a worthwhile and necessary work. It serves a dual purpose, for it safeguards the health of the migrants and protects areas near these camps from being threatened by infection.—Sacramento *Bee*, September 27.

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County Hospital Aides Honored

Certificates Given Thirteen Doctors for Service

Certificates of honor were issued yesterday by the Los Angeles County Board of Supervisors to thirteen physicians and surgeons who for ten years or more have been giving their professional services free to the county by being members of the attending staff of the Los Angeles County General Hospital.

Those who received the certificates are: Dr. George Henry Kress, 727 W. Seventh Street, 31 years; Dr. Henry Herbert, 1127½ Fourth Avenue, 30 years; Dr. Charles C. Browning, 25 Kewen Place, San Marino, 24 years; Dr. Walter L. Huggins, Pacific Mutual Building, 24 years; Dr. William H. Kiger, 1930 Wilshire Boulevard, 24 years; Dr. Frank J. Leavitt, 111 N. Manhattan Place, 24 years; Dr. Clarence H. Criley, Chapman Building, 20 years; Dr. Dwight M. Green, 727 W. Seventh Street, 19 years; Dr. J. E. Clemons, 307 W. Eighth Street, 17 years; Dr. Burdette S. Frary, 5625 N. Figueroa Street, 17 years; Dr. Henry Lietrich, 1136 W. Sixth Street, 14 years; Dr. John W. Shuman, 3780 Wilshire Boulevard, 14 years; and Dr. Eliot Alden, 6253 Hollywood Boulevard, 11 years.—Los Angeles *Times*, October 27, 1938.

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Medical Society Stands by Doctor in Insurance Case

Fresno, Oct. 11.—(Exclusive)—The governors of the Fresno County Medical Society today issued a public statement absolving Dr. G. K. Nider, city physician and head of the City Emergency Hospital, of charges on which Mayor Homan recently issued an order dismissing Doctor Nider.

The mayor charged Doctor Nider wrongfully appropriated to his own use more than $2,000 paid by the State Compensation Insurance Fund for treatment given city employees. The mayor charges the money should have been paid into the city treasury.

Doctor Nider asserted the money was paid him for extra services given city employees and not within the scope of the work required by his post as city physician.—Los Angeles *Times*, October 12.

* * *

Plan Nonprofit Hospitals Here

California's ten southern counties soon will become the national testing ground for a coördinated nonprofit hospital-medical service, if plans entertained by leaders of the two groups reach maturity.

That was the statement made today by Ritz E. Heerman, president of Associated Hospital Service of Southern California and also secretary of California Hospital, following his return from Dallas, Texas, where he attended the recent convention of the American Hospital Association.

Several medical groups are surveying the Southern California situation and leaders of the already organized hospital groups stand ready to offer the medical fraternity their full coöperation as soon as the medical profession has completed a workable program, Heerman said.

Renewed interest of the medical profession in a combined hospital-medical nonprofit service for large groups of employed wage earners was aroused by the action of the house of delegates of the American Medical Association at its meeting in Chicago.—Los Angeles *Herald-Express*, October 10.

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Medical Society Hits Pound Move

A campaign by the Fresno County Medical Society against the State Humane Pound Act initiative on the November general election ballot as proposition No. 2 was launched yesterday with an announcement of opposition to the measure by Dr. L. R. Nielson, secretary.

The Society, the California Society for the Promotion of Medical Research and the California Medical Association are opposing the proposition on the ground it will interfere with research and experimental medicine, hinder medical practice, and is a disguised anti-vivisection bill.

Doctor Nielson announced a dinner meeting of the Society October 11 at the University and Sequoia Club with the speakers to be W. W. Roblee, Riverside, president of the state association, who will report on a national medical session at Chicago on the economics of medicine and George H. Kress, San Francisco, secretary of the state association.—Fresno *Bee and Republican*, October 6.

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Geiger Back With Honors

Home from the Antipodes on the Matson liner *Mariposa*, Dr. J. C. Geiger, San Francisco's director of public health, today proudly displayed a gold and black shoulder patch for his flowing academic robes.

The patch proclaims Doctor Geiger an honorary member of the Central Medical School of Fiji, a school which he has befriended for many years.

The Suva institution has honored only two other men in the same manner. One is Dr. Victor G. Heiser of "An American Doctor's Odyssey" fame. The other is Richard Crooks, who raised thousands of dollars in a concert, aiding the move to rear distinguished Fijian medical talent.—San Francisco *Call-Bulletin*, September 7.

* * *

The Real Reason

The city health officer declares that "rabies can never be controlled if citizens allow their dogs to run at large." The doctor is quite right, but even keeping every citizen's dog carefully penned up won't eradicate rabies as long as stray dogs—and there are hundreds of these—are permitted the free run of the streets.

There's the real reason for the continued rabies menace. And no "study" is needed to convince the council or the health officer of that deplorable fact. And, by the city manager's own "say so" there's already a law empowering enforcement officers to shoot or corral such dogs on sight.

When dog owners know if they allow their pets to run at large they are in danger of being shot, they'll keep them in their own backyards. Then, with an "open season" on all strays, rabies can be controlled, and, within a couple of months, entirely eradicated.—San Jose *Mercury Herald*,

* * *

Northern Ills Told by Physician

The Eskimo and the white man living in the Arctic are heir to the same ills and die of the same diseases as people living in temperate zones, said Dr. Victor E. Levine, Tuesday, just returned to San Francisco after his fourth medical research trip, which he conducted in conjunction with Rev. Bernard Hubbard's geological expedition in Alaska.

Doctor Levine, whose research is sponsored by the United States Department of Health, said the white man in the Arctic lives to practically the same age, sixty years, as man in temperate zones. He said the average span of life for the Eskimo is twenty-four years.

The scientist, formerly professor of biological chemistry and nutrition at Creighton University School of Medicine, has made his research expeditions in the interest of determining whether or not the Arctic is suitable for habitation by white men.

"A study of the health problems of the Eskimos," Doctor Levine said, "indicates that the diseases to which they now succumb result from lowered resistance to infection induced by malnutrition.—Santa Clara *Journal*, October 4.

* * *

American Federation of Labor Will Act on Socialized Medicine Plea

Resolutions Favoring Project Will Be Offered at Houston by California Delegation

Urgent appeal for legislation favoring a national plan of socialized medicine or compulsory health insurance will be presented to the Houston convention of the American Federation of Labor this week on behalf of the California State Federation of Labor, Edward D. Vandeleur, secretary, announced yesterday.

A resolution covering the subject will be presented to the American Federation of Labor meeting by Tom Nickola, State Federation delegate. It is based on six proposals concurred in by the recent Santa Barbara convention.

Huge Loss Cited

This resolution cites the importance of health to the wage earner, recognition of the workers' needs by the recent National Health Conference called by President Roosevelt,

and present inability of lower paid workers to benefit from advancements in medical science.

"Medical surveys show that there is a direct relationship between income and need of medical care and that those having smaller incomes are unable to get adequate care," the resolution states, and adds "that more than one billion work days are lost annually due to sickness, and that the industrial worker carries the greater part of the loss from this expense.

Plea to Workers

Legislation on the subject will be pressed before the next session of Congress and the next State Legislature, Vandeleur said, while urging all workers to request their congressional Representatives and Senators to support measures for compulsory health insurance, with national and state governments, employer and employee participating.

The State Federation will also work for Federal grants as an aid to supplement state and local funds for the establishment of rural hospitals in districts where privately owned hospital facilities are inaccessible to many because of high priced services.

Two of the resolutions on the health matter were offered by Typographical Union, No. 21, of San Francisco, through Delegate Bert Allyn.—San Francisco *Examiner*, October 3.

* * *

Grange Does Not Approve Plan of Federal Doctors

The vigorous campaign now in progress in support of a federalized medical program which shall provide more physicians for rural areas, but under government supervision as well as selection, is not supported by the National Grange, although the latter is everywhere recognized as the chief spokesman for the rural welfare. At a recent hearing in Washington, when a socialized medical program for rural areas was strongly advocated and vigorously opposed by respective groups, the National Grange presented a strong statement through its Washington legislative representative, Fred Brenchman, which makes very clear the Grange attitude on this question.

It is the belief of this great farm organization that the present lack of rural medical service is due to a faulty system of medical education, which requires such a long and expensive period of preparation before the physician is allowed to enter practice. More than ten years ago the National Grange took a stand on this question, advocating the increase in general practitioners for country service, in contrast to the extreme swing toward the specialist, whose education and equipment must necessarily be so expensive.

The Grange advocates no lowering of medical standards, but does believe that it is possible to acquire a proper medical education on the basis of a high school education and four years of subsequent training, provided that the latter shall include at least one year of practical hospital experience. In this opinion many distinguished physicians in the United States concur, and if such a training will produce competent physicians, it is the belief of the Grange that many more practitioners for rural areas and the smaller towns can easily be made available; thereby solving the present medical problem without the expenditures of vast sums of money on a federal program and the extension still further into American life of the "socialized idea," to which the Grange has never given its approval.—Sacramento *Grange News*, September 20.

* * *

Pay Patient Plan Talked by Grand Jury

Suggestions for operation of the new county hospital, now nearing completion, were considered at a meeting of interested groups with the hospital committee of the grand jury late Thursday afternoon.

Whether pay patients should be admitted was one of the questions considered by the group, which went into various phases of the county health setup, according to Mrs. Jo Allyn Clark, chairman of the hospital committee.

No conclusions were reached, she said.

It was decided to send questionnaires to individual members of the Butte County Medical Society to obtain their views.

San Joaquin Plan

Method of operating the San Joaquin County Hospital, where pay patients are admitted, was explained by members of a former grand jury and members of committees from the Butte County Farm Bureau and the Pomona Grange which visited the Institution. They included A. L. Chaffin, a grand juror, Mrs. John Caughey of the farm bureau, and Mrs. Carolyne Smith and Mrs. Veronica Henderson of the Grange.

Others who attended the meeting, held in the courthouse, included Dr. L. A. Jacoby, county health officer and ex officio county physician; Dr. N. T. Enloe of Chico and Archie Allen, superintendent of the county infirmary.

Other meetings are contemplated.

No definite date has been set for opening of the new hospital.—Oroville *Mercury*, October 7.

* * *

Parents Rebuff Doctors in Rabies Peril

Two young Menlo Park high school pupils, bitten last Thursday, by a rabid dog, went calmly to their classes today, their wounds untreated.

County Health officers, balked by the children's parents, stood by helplessly, unable to interfere, though they feared that without medical aid the youngsters may be doomed.

Steadfastly the parents, their names withheld by the county officers and by school authorities, refused to allow Pasteur treatments to be given their children, a boy and a girl.

They based their refusal on religious reasons.

"We don't think it's necessary," they insisted.

Four other persons, two children and two adults, were bitten by the same dog. They were given medical treatment immediately. The animal, a stray fox terrier, died last week in the Palo Alto Animal Shelter. Examination proved the animal was infected by rabies.

School and health authorities, aroused by Dr. R. J. Gerlough's report on the dead dog, went to the parents, informed them that without the Pasteur treatment it was probable, though not certain, that the children would be infected. The infection, in any case, would not become apparent for several weeks, but the parents were willing to risk their children's lives.

Both sets of parents were equally certain they would not change their minds.

"My child's wound is only trivial," one mother said. "Even if the treatment were given, they are not guaranteed effective. I don't see why so much fuss is being made."

The other parents also were unwilling to change their minds.

"We have discussed every possibility," they declared. "The scratch is slight, there was no blood drawn. We won't alter our decision."

Dr. J. C. Geiger, San Francisco health officer, pointed out that a wound is not necessary to contraction of hydrophobia. He cited cases in which mere handling of an infected animal transmitted the disease to a human, and urged that every child who handled the dog be treated.

The youngsters were bitten as they boarded a bus at Santa Cruz and Johnson avenues, Menlo Park, on their way to Sequoia High School. Since then they have continued to attend classes as usual.

First to be bitten by the mad dog was a Menlo Park housewife. She told authorities the animal entered her yard, started to attack her child who was playing nearby. The mother thrust out her hand and the terrier sank his teeth in it. He clenched them so tightly that neighbors had to pry the hand loose.

The dog ran to the bus stop, nipped at the heels of one of the children. Rather than have her stockings torn she picked the dog up, carried it to the bus, where she set it down. The animal ran under the bus and one of the boys crawled under it. He was bitten on the hand. Two other youngsters were bitten as they petted the animal after it had been rescued.

The second adult, also a woman, was bitten after the bus left. The animal was captured after Doctor Gerlough got reports on the attacks.

Doctor Gerlough announced he was writing a letter to the parents of the two children who refused treatment, warning that they faced possible disastrous consequences.

There was a possibility that a quarantine would be placed on San Mateo County if further cases of rabies develop, Health Officer Dr. Charles Gans declared.

Santa Clara County has had several cases in the past few months, and it was feared that the infection was moving northward.

In Oakland two youngsters were bitten today.—San Francisco *News*, October 18.

* * *

Single Health Unit Sought

Supervisor Pushes Plan to Consolidate City and County Work

A move toward consolidation of the county and city health departments was made yesterday when the Board of Supervisors, on motion of Supervisor John Anson Ford, instructed the County Bureau of Budget and Research and Wayne R. Allen, chief county administrative officer, to study the plan.

Survey Ordered

The board ordered the county officials to make a detailed survey of the possibilities of the consolidation by

means of a contract of health functions between the City of Los Angeles and the county and report their findings to the Mayor and City Council of Los Angeles.

It was also directed that the city government of Los Angeles be invited through its Mayor and Council, independently, to make similar studies as those made by the county officers.

Contract Proposal

The contract between the county and the city referred to would be similar to those now held by the county government with thirty-eight of the forty-four cities in the county—whereby the county health department performs the health services for the cities.

The supervisor said preliminary estimates by health authorities foresee a probable reduction in the city tax rate for public health service of from 35 to 50 per cent in the event of a consolidation of services, resulting in a possible annual saving to the city taxpayers of from $150,000 to $200,000.

Parrish Asserts Plan Would Add to Costs

City Health Officer Parrish yesterday answered a proposal of Supervisor John Anson Ford that the Los Angeles county health department take over the city health service with the statement that the plan would greatly increase costs to the city.

"Never in the last fifteen years has the county department done its work half as cheaply as has the city department," Doctor Parrish said. He cited figures of 45 cents per capita for city service and $1.25 for the county.—Los Angeles *Times*, September 28.

* * *

Dr. Emma Sutro Merritt Dies; San Francisco Gets Park

San Francisco had lost a pioneer and gained a park by death today. In the old house on wind-swept Sutro Heights, overlooking the ocean, death claimed Dr. Emma Sutro Merritt.

For many years she had lived in retirement there with the rich memories of her eighty-two years, all spent in San Francisco. Her mind was keen to the end, but her body long ago began surrendering to the ravages of time. Death came quietly.

Her Sutro Heights estate, studded with garden statuary and trees that whisper of a golden past, becomes the property of the city. She deeded it long ago, with the provision that she occupy the home until death.

Memorial to Father

She willed that it be maintained as a memorial to her father, Adolph Sutro, financier and mayor of another age.

Born in San Francisco December 15, 1856, and reared in comfort, Doctor Merritt chose medicine as a career in an age when women physicians were frowned upon. She married a physician, Dr. George Merritt. For twenty years she was staff doctor at Children's Hospital.

More than thirty years ago she was compelled to surrender her practice to manage the estate of her father.

Adopted Three Children

Childless, she adopted Edgar D. Sutro, son of her brother. He and his two sisters, Marian and Rose, made their home with her.

Funeral services will be at 10:30 a. m. tomorrow at Divisadero and Post streets. Interment will be at Cypress Lawn.—San Francisco *News*, October 18.

* * *

Nursing Act Is Meet Topic

Proposed enactment of the Nursing Practice Act, which will be introduced to the California State Legislature in January, was presented by Mrs. Jennie W. Gardner, State legislative chairman for the California State Nurses Association, who spoke before the Yuba-Sutter group Friday evening. A dinner held in Hotel Marysville was attended by fifty members and guests.

The sole purpose of the proposed act is to guarantee the public the protection to which it is entitled and to maintain high standards of nursing and nursing education in the State.

As pointed out by Mrs. Gardner the act would protect the public, the physician and the institution by requiring that all persons nursing for compensation be registered nurses. It would create a board of nurse examiners, comprised of experienced registered nurses whose duties would be comparable in every way to those of the State Board of Medical Examiners, dental examiners, pharmacists and others devoted to safeguarding the public health. The five would be appointed by the governor.

The act provides for the regulation of schools of nursing and the maintenance of high educational standards. There would be no restriction for licensed nurses. All graduate nurses who now hold a certificate of registration would be eligible to a license by the new board, it was said.

Mrs. Gardner pointed out its benefits and the advantages of an all-nurse board.

Miss Frances Switzer presided and introduced the speaker. Senator W. P. Rich was one of the invited guests. —Marysville *Appeal-Democrat*, October 1.

* * *

Fishbein Fights United States Medical Research Plan

American Medical Association Spokesman Insists Individual Efforts Should Be Free From Politics

Chicago, Oct. 8.—(UP)—Dr. Morris Fishbein, editor of *The Journal of the American Medical Association*, took exception last night to statements that medical research should be coördinated under Government supervision.

"The history of medicine," he said, "has been based on the individual efforts of many. Only the politician could disparage the contributions of medicine to public health."

He is spokesman for organized medicine in its fight against Government plans to prosecute the American Medical Association for "boycotting" coöperatives and low-cost clinics in violation of anti-trust laws. His statements were in reply to Dr. Thomas Parran, surgeon general, United States Public Health Service. Both spoke at day-long ceremonies yesterday in connection with the dedication of a research building in North Chicago.

Doctor Parran had said public health had become a people's cause and it appeared "logical and desirable that the Federal Government assume a larger responsibility for leadership in scientific research."—San Francisco *News*, October 8.

* * *

State Medical Examiners Retained

Examiner Bureau, Sacramento, Oct. 17. — The State Board of Medical Examiners reëlected its entire incumbent slate of officers here today, retaining Dr. William B. Molony of Los Angeles as president.

Dr. Clark L. Abbott, Oakland, was reëlected vice-president, and Dr. Charles B. Pinkham, San Francisco, secretary-treasurer. It was Doctor Pinkham's twenty-fifth consecutive election as secretary-treasurer.

Both he and Doctor Molony have been members of the Board since its inception in 1913. Doctor Molony has been president since 1933.—San Francisco *Examiner*, October 18.

* * *

Public Works Administration Grants Million for San Francisco Hospitals

Sum Added to Bond Issue Provides $2,283,470 Toward Building and Modernization

SPLIT THREE WAYS

Laguna Honda and Hassler Health Farm to Share Fund With Main City Institution

San Francisco yesterday was assured of one of the most complete and modern city hospital systems in the world when the Federal Public Works Administration announced a grant of $1,027,562 toward a hospital construction program here.

With $1,255,908 provided from the $1,600,000 hospital bond issue voted last November, the grant will enable a $2,283,470 building and modernization program to get under way by January 1 with completion slated in two years. The balance of $344,082 remaining from the bond issue will be retained as a cushion.

Geiger Elated

Dr. J. C. Geiger, city health director, received news of the grant enthusiastically, declaring:

"This means the most marvelous hospital setup I know of.

"When the program is completed," he said, "all our hospital needs, except emergency hospitals, will be taken care of for many years to come."

The $2,283,470 expenditure will be split among Laguna Honda Home, San Francisco Hospital and Hassler Health Farm in San Mateo County as follows:

Laguna Honda—$1,017,016 for a new 450-bed chronic disease ward, remodeling another ward, and reconstructing old wards for use of ambulatory patients and personnel, plus equipment.

To Isolate Cases

San Francisco Hospital—$426,872 for additional facilities, principally x-ray, and modernization of kitchen and dining rooms, plus equipment.

Hassler Health Farm—$590,478 for a series of new buildings, a new ward for chronic tuberculous, fire protection

equipment, sewage disposal plant, a building for convalescents and a ward for subnormal children.

An item of $249,104 covering preliminary costs, engineering, legal, administrative, and miscellaneous expenses, and interest during construction will be spread among all three projects.

The new construction means, Doctor Geiger explained, that for the first time the health department will be able to centralize different types of patients each in one institution, with considerable savings resulting.

Chronic Disease

Chronic disease cases will be moved out of San Francisco Hospital to Laguna Honda Home. Tuberculous patients will be transferred from the same institution to Hassler Health Farm. As a result San Francisco Hospital will become the first time devoted solely to acute medical and surgical cases, fed to it by the emergency hospitals, Doctor Geiger said.—San Francisco *Examiner*, October 8.

* * *

State's Blind Get $192,481

Sacramento, Oct. 19.—(INS)—The Social Security Board in Washington today approved an allocation of $192,481 to go to 5,682 sightless in California receiving state aid in November and December, it was announced by Mrs. Florence L. Turner, state director of social welfare.

Mrs. Turner said the average payment would be $47.86 per month.—San Francisco *Call-Bulletin*, October 19.

* * *

Medical Insurance Plan Urged by Cleveland Doctors

Cleveland, Sept. 9.—(AP)—Directors of Cleveland's Academy of Medicine stepped into the middle of "socialized medicine" discussion today with a plan through which employed persons could pay $7 to $9 a year to insure themselves against a maximum of $126 in doctors' bills incurred in the course of hospitalization.

The directors said they would submit the proposal to the academy's membership—a majority of Cleveland's physicians and surgeons—as soon as details are decided.

Plan Restricted

The plan, designed solely to cover serious accidents or illnesses, would benefit only those patients sent to hospitals. It also would be restricted to members of the Cleveland Hospital Service Association. This organization, the academy said, "now has more than 100,000 subscribers to whom twenty-one days of hospital service is furnished in any one year for a prepayment of $7.20 to $9 annually" under a program described as "ethical and actuarially and socially sound."

The academy's proposal would provide, for matching fees, similar medical service benefits—payment at $6 a day for a maximum of twenty-one days. Total fees thus would run around $15 to $18 a year, and potential benefits $252.

Deducted from Pay

The Hospital Service Association serves principally persons with incomes from $1,000 to $2,600 a year, those upon whom it considers the burdens of illness fall heaviest. Employers deduct its fees from the pay of participating employees, and forward them to the association. For additional fees a member may obtain benefits for his family—even including obstetrical care after the one year's membership.

Dr. Milton B. Cohen, chairman of the committee which drafted the medical service project, said:

"It is our hope that, if practical in Cleveland, this plan will point the way for a national attack upon the problem of meeting the burden of catastrophic illness."—Los Angeles *Times*, September 10.

* * *

Health Plan Forecast

Denver, Sept. 8—(AP).—The medical profession will be able to create a satisfactory plan to provide adequate medical care for low-income groups, in the opinion of Dr. Irvin Abell of Louisville, Kentucky, President of the American Medical Association.

Proposals advanced by the recent National Health Conference will be brought before a special session of the Medical Association's House of Delegates Friday in Chicago, Doctor Abell said in an interview here last night. He predicted the delegates would remain in session until they evolve a plan that may be submitted to Congress.

He said the medical profession had no objection to three proposals adopted by the National Health Conference in Washington:

An annual federal appropriation for preventive medicine, the spending of federal money for constructing and enlarging hospitals, and the granting of federal money to states for medical care of the indigent.

He declared unworkable and "dangerous to the high standards of the medical profession" proposals to establish a system of sickness compensation for workers and to set up accounts, similar to social security accounts, to pay for medical care.—New York *Sun*, September 8.

LETTERS

Subject: Scholarships in Rome.

TREASURY DEPARTMENT
UNITED STATES PUBLIC HEALTH SERVICE
WASHINGTON

September 24, 1938.

To the Editor:—The Carlo Forlanini Institute in Rome, which specializes in lung diseases and tuberculosis, organizes, yearly, postgraduate courses for physicians. These courses are held every year from January 15 to April 15. The program for the next course is as follows:

Pathogenesis of tuberculosis—The doctrine of respiratory trauma.

The biologic factors in the local reaction of pulmonary tuberculosis.

The various clinical forms of pulmonary tuberculosis.

Histology and general histogenesis of pulmonary tuberculosis.

Pathological anatomy of the various forms of pulmonary tuberculosis.

The collapse therapy (pneumothoracic) technique—indications—mechanism of action.

The pleural complications—treatment.

The surgical collapse therapy with particular reference to the methods of the School.

The principal forms of extrapulmonary tuberculosis.

Tuberculosis and pregnancy.

Tuberculosis in infancy.

Tuberculosis in upper air passages.

Tuberculosis of bones and articulations.

Hygiene and tuberculosis.

The fight against tuberculosis in Italy.

The Italian ambassador at Washington has offered two scholarships to American physicians selected by the Public Health Service. The physicians chosen will be exempt from registration and tuition fees, and will be granted a 50 per cent discount for travel on Italian state railroads.

The candidates should be graduates for at least three years, having practiced in a sanatoria or in medical or scientific institutions specializing in tuberculosis and lung affections.

I am wondering whether you would have a news item of these courses included in the next issue of your journal, with the notation that any physicians interested should apply directly to the Surgeon General of the Public Health Service, Washington, D. C.

Respectfully,

ROBERT OLESEN,
Acting Surgeon General.

Subject: Concerning nurses.

AMERICAN NURSES' ASSOCIATION

September 29, 1938.

To the Editor:—"What kind of nurse, Doctor," and "Where can I get her?" are questions frequently asked the physician who has just told the responsible member of a family that a nurse is needed to care for the patient.

Doctors invariably want safe nursing care for their patients. Service counts.

To help busy physicians answer questions about nursing care, the Nursing Information Bureau of the American

Nurses' Association has prepared two folders, called "Wanted, a Real Nurse, an R. N." and "Safe Nursing Care and Where to Ask for It." Copies of them are enclosed. They discuss briefly the significance of the term "Registered Nurse" and suggest how to secure the type of nursing service which may be needed.

Physicians may secure copies of the folders from the Nursing Information Bureau, 50 West Fiftieth Street, New York City. We would be glad to have you advise them of this offer through your magazine.

Sincerely yours,

MARY M. ROBERTS,
Director, Nursing Information Bureau.

Subject: Letter of appreciation for health lectures.

THE YOUNG WOMEN'S CHRISTIAN ASSOCIATION
SAN FRANCISCO

October 17, 1938.

George H. Kress, M. D.,
Secretary, California Medical Association.

My dear Doctor Kress:

I wish to express our appreciation for your coöperation in setting up our series of health lectures for this fall. The list of speakers and their subjects is very satisfactory. It is always amazing to me that such busy and important doctors can give their time to help us with our community health education projects.

We do want to thank you for arranging it for us. If at any time we can aid you in any way, please know we will be only too happy to do so.

620 Sutter Street.

Sincerely yours,

DORIS MCFARLAND,
Associate Director, Health and Recreation Department.

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The subjects and names of speakers follow:

October 13—Cosmetic and Facial Blemishes, Laurence Taussig.

October 20—Eyes, George N. Hosford.

October 27—Medical Examinations, Donald Carson.

November 3—Menstruation and Its Disorders, Harold G. Watson.

November 10—Cancer, Ludwig Emge.

November 17—Venereal Diseases, E. K. Stratton.

Subject: Legal status of physicians under the Workmen's Compensation Act of California.*

San Francisco, October 18, 1938.

George H. Kress, M. D.,
Secretary, California Medical Association,
450 Sutter Street,
San Francisco, California.

Re: Pacific Employers' Insurance Company vs. Industrial Accident Commission and Kenneth Tator.

Dear Doctor:

The above-entitled action, which was decided several months ago by the California Supreme Court in favor of the injured employee, Tator, and Drs. J. Scott Quigley, Ergo A. Majors, and N. Austin Cary, and against the Compensation Insurance Company involved, has been appealed to the United States Supreme Court. Yesterday, October 17, the Supreme Court of the United States granted a writ of certiorari, which means that it will hear the case later this fall.

I am this day informing the doctors concerned regarding the action of the United States Supreme Court.

111 Sutter Street.

Very truly yours,

HARTLEY F. PEART.

* Under this caption this subject was discussed in the Medical Jurisprudence department of CALIFORNIA AND WESTERN MEDICINE, in its issue of March, 1938, on pages 215 and 216.

MEDICAL JURISPRUDENCE †

By HARTLEY F. PEART, ESQ.
San Francisco

Corporate Practice of Medicine: A Discussion of the Recent Decision of the California Supreme Court Denying to Capital Stock Corporations the Right to Control or Select Physicians

In December, 1935, the District Court of Appeal for the First Appellate District, decided in *Pacific Employers Ins. Co.* vs. *Carpenter,* 10 Cal. App. (2d) 592, that an insurance company could not lawfully issue a medical and surgical insurance policy under the terms of which the insurance company would furnish to its policyholders medical and surgical services through certain designated physicians. The District Court of Appeal held that neither a corporation nor any other unlicensed person may engage directly or indirectly in the practice of medicine and from this premise reasoned that it was likewise contrary to the law for an insurance company to undertake to furnish to its policyholders the professional services of physicians and surgeons designated, selected or employed by it.

A few months later the District Court of Appeal for the second Appellate District, in *Benjamin Franklin Life Assurance Co.* vs. *Mitchell,* 14 Cal. App. (2d) 654, also held that an insurance company could not lawfully issue a policy of insurance under which medical services would be rendered to policyholders through physicians in effect selected by the company. In this case the insurance policy proposed to be issued apparently provided for freedom of choice of physician by the policyholder, but at the same time policyholders were *required* to execute a proxy to a committee of company officers under the terms of which the committee selected the physician to render services.

After the foregoing decisions of the District Court of Appeal, it was generally considered by legal writers (Notes, 25 Cal. Law Rev. 91; 10 So. Cal. Law Rev. 329; 30 Ill. Law Rev. 533), that in California, at least, it was firmly settled that a private corporation could not engage in the practice of medicine. It was further generally assumed that it was also the law that a corporation or any other unlicensed person which attempted to designate or select a physician and surgeon to whom patients must go in order to receive the benefits of a contract, was in effect practicing medicine and surgery in violation of the rule forbidding corporate practice.

However, at least one corporation organized for profit and engaging in the *business* of selling membership certificates entitling the holder to medical and surgical services only from physicians selected by the corporation, evidently felt that the last judicial word had not been said on the subject. The corporation mentioned, *i. e.,* Pacific Health Corporation, continued to issue membership certificates and to furnish medical services through designated or selected physicians. Thereupon, the Attorney-General's office, acting on the relation of the Board of Medical Examiners,

† Editor's Note.—This department of CALIFORNIA AND WESTERN MEDICINE, presenting copy submitted by Hartley F. Peart, Esq., will contain excerpts from and syllabi of recent decisions and analyses of legal points and procedures of interest to the profession.

commenced an action against the Pacific Health Corporation, seeking an order of court restricting Pacific Health Corporation's corporate powers so that selection of physicians by it would necessarily cease.

When this action came before Judge Goodell of the Superior Court in San Francisco, it was decided in favor of the plaintiff and an order was made prohibiting the defendant, Pacific Health Corporation, from continuing its past activities with respect to the furnishing of medical and surgical services. Pacific Health Corporation thereupon appealed to the Supreme Court of California and the decision of that court was rendered on September 21, 1938. (See *People* vs. *Pacific Health Corporation*, 96 Cal. Dec. 349; also CALIFORNIA AND WESTERN MEDICINE, October, 1938, page 306.)

The facts involved were stated by the Supreme Court as follows:

> Defendant Pacific Health Corporation, Inc., is a corporation organized under the general corporation law of the State of California, with its principal place of business in San Francisco. Upon application of persons in good health, the defendant issues a contract by the terms of which defendant undertakes to pay for services rendered by physicians, hospitals, ambulance and medical laboratories under certain circumstances, and the applicant pays the required sum or premium therefor. When a contract holder becomes sick or is injured, defendant advises him from whom these services are to be obtained, that is, the physician, hospital or ambulance available to him. After the services are rendered, defendant pays the charges. Defendant keeps a list of physicians and surgeons approved by it, and to obtain the benefits of the service the contract holders must, save as to emergency expenses not exceeding $50, accept a doctor from the list.
>
> Defendant is a stock corporation, operated for profit. It advertises its services and solicits the public for purchase of its contracts, paying commissions to its soliciting agents. The money collected from contract holders is paid into the general fund, and this, together with the capital and surplus, is invested. The charges for medical services are paid out of the general fund and income from investments.

The Court then stated that it adhered to the established doctrine that a corporation may not engage in the practice of such professions as law, medicine or dentistry. Next, it applied the above stated facts to the rule announced and reached the conclusion that the activities of the Pacific Health Corporation were, in effect, corporate practice of medicine and hence were unlawful.

During the course of its opinion the Court mentioned two contentions that had been made by counsel for the Pacific Health Corporation. One of these was that the physicians secured by Pacific Health Corporation were not employees of it, but were independent contractors because they were paid on a fee basis rather than a salary. The other contention was that a decision against the Pacific Health Corporation would outlaw all religious, charitable, fraternal and employee organizations now rendering medical care in this state through physicians and surgeons.

With respect to the independent contractor assertion, the Supreme Court held as follows:

> We are unable to agree that the policy of the law may be circumvented by technical distinction in the manner in which the doctors are engaged, designated or compensated by the corporation. The evils of divided loyalty and impaired confidence would seem to be equally present whether the doctor received benefits from the corporation in the form of salary or fees. And freedom of choice is destroyed and the elements of solicitation of medical business and lay control of the profession are present whenever the corporation seeks such business from the general public and turns it over to a special group of doctors.

It is thus to be noted that the California Supreme Court has squarely held that any restriction of freedom of choice of physicians and surgeons by use of the corporate mechanism violates a fundamental public policy of the state and is, therefore, unlawful.

In answering the corporation's assertions with respect to fraternal, religious, charitable and employee organizations, the Court first pointed out that such organizations were not before the court and then expressed the opinion that there is a fundamental distinction between an ordinary private profit-seeking corporation and the type of organization mentioned. In the court's opinion the fundamental difference between fraternal, religious, charitable or employee associations organized for purposes other than profit and ordinary stock corporations is that:

> The public is not solicited to purchase the medical services of a panel of doctors; and the doctors are not employed or used to make profit for stockholders. In almost every case the institution is organized as a nonprofit corporation or association. Such activities are not comparable to those of private corporations operated for profit and, since the principal evils attendant upon corporate practice of medicine spring from the conflict between the professional standards and obligations of the doctors and the profit motive of the corporation employer, it may well be concluded that the objections of policy do not apply to nonprofit institutions.

The Court concluded its opinion with a discussion of health insurance and group medicine. It stated, first, that if the rule against corporate practice of medicine is to be changed, such change must come from the legislature and not the courts. It then stated that even if some form of health insurance or group medicine is desirable, it is possible to bring adequate medical service to the general public and at the same time protect both the profession and the public from the evils of corporate practice. The Court used as an illustration of its statement the health service system recently adopted by the employees of the city and county of San Francisco, under which all physicians practicing in San Francisco are *entitled* to render professional services to city employees, subject only to compliance with such rules and regulations of the health service board as are of a reasonable nature and acceptance of uniform rates of compensation.

Three of the seven justices dissented from the opinion of the Court. The dissenting opinion was based upon the proposition that " a corporation or a layman may lawfully employ a doctor to care for its patrons or members." In support of this proposition, cases from Nebraska and Missouri were cited. The dissenting justices also were of the opinion that *Pacific Employers' Insurance Co.* vs. *Carpenter, supra,* and *Benjamin Franklin Life Assurance Co.* vs. *Mitchell, supra,* should be overruled.

It should be observed that the *legislature* has forbidden corporate practice of medicine (Business and Professional Code, Sections 2006, 2007, and 2008) and that the Nebraska and Missouri cases relied upon by the dissenting justices are contrary to express California statutes as well as California judicial decisions.

Analyzing the decisions of the District Court of Appeal and the Supreme Court, it may now be concluded that in California the law with respect to corporate practice of medicine is as follows:

1. A corporation organized for profit or having stockholders may not engage in the practice of medicine or surgery.

2. Any attempt by such a corporation to restrict freedom of choice of physicians or to solicit contracts with persons who may become patients of physicians selected by the corporation, constitutes in effect the corporate practice of medicine and surgery and is forbidden.

3. Corporate practice is unlawful even though the corporation's shareholders or other proprietors may be physicians.

4. Nonprofit corporations (organized under Civil Code, Sections 593 *et seq.*) or associations furnishing the services of physicians and surgeons to employees of a common employer or furnishing medical services as a part of a religious or fraternal or charitable endeavor are probably not violating Rule 1 above (each enterprise will have to stand or fall according to its particular circumstances); and

5. Any change in the law, with respect to corporate practice of medicine and surgery desired by any special interests, must be sought from the legislature and not the courts.

SPECIAL ARTICLES

STATE HUMANE POUND ACT

"All technicalities aside, the so-called 'State Humane Pound Act' is aimed against animal experimentation by those who have twice failed in recent years to pass similar state-wide legislation. We are confident that if the citizens of California understand the menace to health and safety that is in this bill they will overwhelmingly defeat it."

This appeal to the voters to defeat Proposition No. 2 on the November 8 ballot has just been issued by Dr. Ray Lyman Wilbur, President of Stanford University and also President of the California Society for the Promotion of Medical Research, which is conducting the campaign against the measure.

Doctor Wilbur calls attention to the fact that a recent vote of the Commonwealth Club of California, taken after a thorough investigation of the legal effects if the "Humane Pound Act" is adopted, resulted in sixty-five votes against the measure and only five for it. Nearly 160 lay, scientific and medical associations have to date gone on record against the initiative.

"Some confusion has been caused," continues Doctor Wilbur, "by the efforts of the proponents of this measure to show that it is practically harmless; but such is not the case. It will hold back the advance of medicine and the relief of human suffering.

"California can be proud of the great research work done by its major institutions. California must become a world center of research in the fields of hygiene, public health, and medicine. Any effort to handicap those who are working in our laboratories or who are manufacturing sera or vaccines for humanity or for our horses, dogs, cattle, sheep, hogs, and chickens, should be promptly defeated.

"Our present laws give full protection against cruelty or abuse that all of us dog-owners demand. The 'Humane Pound Act,' is a long step in the direction of harming medical research and, for the sake of every man, woman and child in California, it should be soundly defeated at the polls."

"MARCH OF LIFE" EXHIBIT FOR SAN FRANCISCO FAIR

Emphasizing the brighter side of medicine, the cure and prevention of disease, the University of California Medical School's exhibit at the 1939 Golden Gate International Exposition will give visual proof of the steady progress of the healing arts. In a sixteen-unit display, now being assembled and installed under the direction of Dr. Karl F. Meyer, Director of the Hooper Foundation for Medical Research, and Dr. Langley Porter, Dean of the University's Medical School, the story of the accomplishments of medical science will be told.

The first unit of the display will be titled "The March of Life" with a series of thirty-five transparencies showing the history of the individual from the prenatal period to old age, with the various bodily changes involved. The second unit will contain a key index and general descriptive panel which will describe the whole exhibit in detail. The third unit will deal with the animal kingdom, showing how animals are both the friend and foe of man. This will consist of a large painting, eleven feet wide and seven feet high, illuminated from behind, and emphasizing particularly the processes of disease transmission. The fourth unit will show the prenatal period of human life. The fifth, sixth, and seventh will deal with the diseases of children and their prevention, while the eighth will compare growth changes through childhood to adolescence. The ninth will depict the healing mysteries and near miracles of surgery, while the tenth and eleventh will feature the place of the physician in the scheme of life and some of the diseases that he has conquered.

The twelfth unit will be given over to a display on arthritis, illustrated by colored lantern slides. The thirteenth will deal with the right and the wrong way of arriving at old age. The fourteenth will show the percentage shifts in population between people of various ages. The fifteenth will be a display covering nutrition, both good and bad, while the sixteenth will demonstrate the services rendered by the University's medical center to its own students.

The unit showing the prenatal period will be featured by a display of human embryos and other material which will carry the spectator through a large segment of the embryonic history of man. In the displays devoted to child health will be shown how children may be susceptible to various protein substances, to cause various allergies, and how rickets and other diseases of young children are caused. The treatment and cure of these conditions will be closely outlined. Another unit in this group will detail the health education of children, while still another will show, through a series of relief models, the changes of development of boys and girls from eight years to sixteen years.

The place of the physician in the scheme of life will be shown by another great painting, eleven feet high by seven feet wide. This will detail how he steps from the portals of the Medical Center to stand between the people and the diseases that beset them, as one member of a great army of medical men. Another contribution of the Department of Medicine will show in striking pictorial form how incorrect posture and related causes may bring on ailments harmful to the heart and circulatory system and how these may be prevented.

Of particular interest will be the large unit showing the two methods of arriving at old age. This will be another large painting showing what happens to the person who disregards health rules and lets his minor ailments, so-called, run their course, and what happens to the person who makes an effort to keep himself fit. The contrast will be sharpened with a pictured display of what happens to a plot of land that is being subjected to the processes of erosion and neglect as compared to a plot which is carefully cultivated and cared for.

The panel dealing with the animal kingdom is being prepared by the Hooper Foundation, under the direction of Doctor Meyer. The embryo display is under the direction of Dr. William C. Deamer, assistant professor of pediatrics, and Dr. John B. Saunders, associate professor of anatomy. Dr. Francis S. Smyth, professor of pediatrics, has charge of the displays on child care in illness. The display on the health education of children is under the direction of Dr. Edna W. Bailey, associate professor of education. Surgery, which will stress particularly the function of the thyroid gland and the cause and correction of ailments arising from it, will be directed in its display by Dr. H. Glenn Bell, associate professor of surgery. The medical panels will be directed by Dr. Stacy R. Mettier, assistant professor of medicine, the arthritis display under the direction of Dr. James F. Rinehart, associate professor of pathology. Dr. Lionel S. Schmitt, associate professor of preventive medicine, and Dr. Albert E. Larsen, instructor in medicine, have charge of the display showing the two ways of arriving at old age. The nutrition display, which will include a demonstration of foods and eating practices designed to maintain the human body in health, will be under the direction of Dr. Guy S. Millberry, dean of the College of Dentistry, and Dr. Nina Simmonds, lecturer in medicine. In addition, Doctor Millberry will aid in directing the other exhibits showing the relation of dentistry to public and private health.

The ambitious effort of the medical center is occupying the attention of a number of members of the medical profession and of artists and artisans, and every effort is being made to make it a complete picture of medical, surgical and health practices, with the last named being emphasized particularly.

STATE HUMANE POUND ACT

Vote "No" on No. 2

The attention of our citizens is called to Proposition No. 2—the so-called Humane Pound Act—appearing on the November ballot. The *Record* believes this to be one of the most vicious proposals that has appeared on the ballot since 1922, when a similar proposition was defeated by almost 300,000 majority. It is similar in intent to bills which have been defeated time and again without number in the State Legislature.

The casual reader of this Humane Pound Act might be misled into believing that its sole purpose is the protection of stray dogs and cats. What it really would do would be to hamper and cripple all scientific investigation where animal experimentation is carried on in the efforts of physicians to find means for the relief and cure of human ills and for the prolongation of human life.

The great advance in medicine and surgery in the past seventy-five years has been built almost entirely upon animal experimentation. Without such experimentation we would not have had aseptic surgery nor many of the great surgical operations which today save and prolong human lives. We would not have had diphtheria antitoxin nor the preventive vaccination against diphtheria. We would not have had any of the serums or vaccines now so successful in the cure or prevention of smallpox, tetanus (lock-jaw), typhoid fever, hydrophobia. cerebrospinal meningitis, pneumonia, and other diseases. There would have been no insulin for diabetes, no cortin for Addison's disease. We would have known nothing about the value of liver and liver extracts in the treatment of pernicious anemia.

It was only by means of feeding experiments on animals that our knowledge of vitamins was gained. By means of experiments on animals new drugs are tested and proper dosages learned before they are used on human patients.

Most of the advances made in the past few decades in the treatment of tuberculosis, syphilis, and cancer, to name only a few of the many diseases, have come from scientifically controlled animal experimentations. Today the great battle is to find the cause of cancer, and to get better and earlier diagnosis of this great enemy of mankind as well as to find, if possible, a cure. The United States Government has allocated millions of dollars toward research on cancer, most of which will go to finance animal experimentation.

Do not let anyone tell you that these experiments are cruel. A very high percentage of them are feeding experiments or experiments where no greater operation is performed than the prick of a hypodermic needle. When surgical operations are necessary they are performed under anesthesia with the same care and skill as is used in operations on human beings.

Proposition No. 2 puts it squarely up to the voter to decide between stray animals and human beings; between a dog, a cat, a mouse, a rat, a guinea pig, or a human being—perhaps a baby. Protect yourself and your children. Vote "No" on No. 2.—Editorial, Colfax *Record*, October 17.

STATE HUMANE POUND LAW*

What I have to say about animal experimentation in biology and medicine would not be authoritative, since I am not, myself, a biologist or a medically trained person. But my friend and former colleague of the University of Chicago, Prof. A. J. Carlson, as humane and rigorously honest and truthful a man as any one living, has recently written on this subject in the issue of *Science* of September 16, an article which all who wish to be intelligent voters on the proposed State Humane Pound Law should read in full. Let me condense some of its main ideas for the readers of this paper.

* By Dr. Robert A. Millikan.

It is because animals are anatomically and physiologically so much like man that animal experimentation has played so great a rôle in the medical discoveries that have already done so much to abolish plagues and infectious diseases generally in both man and animals; for "free and intelligent experiments on animals during the past three hundred years have been the greatest factor in our present achievements in knowledge of the nature of life and the control of disease." Here are merely two examples out of hundreds:

EXAMPLES CITED

"One of the great discoveries in medicine of all times is the approximate causes of pernicious anemia and the control of pernicious anemia by the liver and gastric principles. I glory in the fact that this discovery was made in this country, our country, these United States. The first steps were taken by experiments on dogs in the city of San Francisco in the great University of the State of California. Then the ball passed to the Atlantic Coast, to fair Harvard. And now the whole world cheers California and Harvard, and Doctor Whipple, and Doctor Minto, and Doctor Murphy. Citizens of California, remember that cheer when you are confronted with proposals to shackle your great universities, proposals which say, in effect, that good doctors of this state cannot be trusted to treat unclaimed stray dogs humanely!

"There were more than thirty years of intensive research on animals—mainly on the dog—before we had the substance insulin in sufficient purity to warrant its trial on people sick with diabetes; and even now every new lot of insulin must be tested on animals before it is safe for the sick man, the sick woman, or the sick child. Every informed layman knows the value of insulin in diabetes in man. You need not take my word for it. Read history and form your own judgment. These facts are obvious. I sincerely believe that if every man and woman in this country knew the inspiring story of the discovery of insulin, all voices would be raised in approbation of such fruitful animal experimentation." . . .

BENEFITS TO ANIMALS

Again, "I could speak to you for hours on what experiments on animals in veterinary medicine have done for the health and happiness of the dog and the cat, the horse, the heifer, the hog, and the lowly hen. We can rid the dog of harmful parasites, including the hookworm, and we are well on the road to prevent dog distemper. As to rabies, we are still in the trenches, but making progress. But let the record speak for itself." . . .

Further, "As to the charge that it is cruel, I have a word to say as a man who has been engaged in animal experimentation for over a third of a century and should know something about it. Cruelty is the wanton or useless infliction of suffering on man or animals. I know the biological and medical research laboratories in this country and abroad, and can state as a fact that in animal experiments involving pain the same anesthetics are used as in surgical operations on man. . . . When animals under anesthesia are used in medical teaching, they are not allowed to come out of the anesthesia. Death by anesthesia is probably one of the least uncomfortable deaths.

There is inflicted on animals more pain in one hunting, trapping and fishing season than in all the centuries of animal experimentation. We use animals, by common consent, for food, for clothing, for labor, for pleasure. Now can it be wrong to use animals humanely to increase our understanding of life, our control of disease, both of which contribute to human and animal happiness? . . .

MAINLY FALSE CHARGES

"As to the tactics of the adversaries to modern biology and medicine. The group that endeavors to cripple the progress of modern biology and medicine by propaganda and restrictive legislation is made up of a small core of

peculiar people; the blindest of the blind; people who do not want to see. This small group, through a persistent propaganda of mainly false charges, mislead a much larger number of poorly informed but otherwise fine, sane, kind, and excellent citizens. The latter usually change their allegiance when they learn the truth about animal experimentation. . . .

"A vote for the so-called Humane Pound Law is a vote of censure of your universities and medical schools. It is a vote to cripple, hamper and impose an impossible financial burden on medical education and medical research in California. It is a vote of lack of confidence in the medical profession of this state. A vote for this measure says: The leaders in medical education and medical research in the State of California cannot be trusted to treat unclaimed stray dogs and cats humanely. . . .

ILLINOIS DEMONSTRATION

"This is what happened in my own city and state a few years ago, when opponents of modern medicine tried to shackle medical research and medical teaching. When the same question was up in Illinois, we invited our fellow citizens (including our adversaries) to come to our medical laboratories to see for themselves whether our work was futile and cruel. They came; legislators, aldermen, men of the mart and women of the home and club, men in the store and men in the street. They saw for themselves and then voted overwhelmingly to give unclaimed stray dogs to reputable laboratories for medical teaching and research, for humane service toward human welfare. This was done by the citizens of Chicago and the State of Illinois. Will the citizens of California do less? Will they put restraining shackles on the noblest endeavors of man?"

The Southern California Committee of the California Society for Medical Research, which is heading the opposition to the proposed State Humane Pound Act, is composed of Robert A. Millikan (chairman), Dr. Remsen du Bois Bird, the Most Rev. John J. Cantwell, Dr. Charles K. Edmunds, Dr. Robert Freeman, Rabbi Edgar F. Magnin, Louis B. Mayer, Dr. Rufus B. von KleinSmid.—*Pasadena Star-News,* October 13.

FEDERAL INVESTIGATION OF DISTRICT OF COLUMBIA MEDICAL SOCIETY CONTROVERSY

Jury Probe Ordered for Doctor Groups

Washington, October 4.—(AP)—Chief Justice Alfred A. Wheat of the Federal District Court here ordered today a special Federal Grand Jury investigation of anti-trust charges against the American Medical Association and the District of Columbia Medical Society.

Justice Wheat, granting a request of Government attorneys, called the special jury to meet on October 17.

The Justice Department, represented by United States Attorney David A. Pine, and Allen Hart, special assistant to Attorney-General Cummings, announced on July 31 it would charge the Medical Association and its local affiliate with illegally interfering with activities of Group Health Association, Inc. Group Health is a coöperative providing medical aid to low-income Government employees.

At a recent press conference Attorney-General Cummings emphasized his department did not charge the American Medical Association with monopolizing the practice of medicine, but that the Association may have conspired to restrain "trade" in violation of one section of the Sherman Anti-trust Act.

The Department charges the local medical society with threatening expulsion of any members who accept employment on the Group Health Association's staff and even of doctors who consult with physicians employed by the Association. It further charges the local society required hospitals here to exclude Group Health staff doctors.—*San Francisco Chronicle,* October 5.

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United States Asks Jury to Indict Medical Association

Washington, October 17 (UP).—The Department of Justice will ask a special grand jury today to return criminal indictments against the American Medical Association and the District of Columbia Medical Society for alleged "coercive" action against a coöperative health movement.

The Government charges that medical societies violated the anti-trust statutes in opposing the Group Health Association, an organization of Government employees to furnish themselves and their families medical care.

The case is an unprecedented application of the anti-trust laws. Officials frankly admit that it is a test case which, if successful, may result in similar action in other cities.

Most of today will be devoted to selection of a jury. Actual presentation of the Government's case probably will begin tomorrow and continue two or three weeks.

The Government's case is a climax to a long fight between the Medical Association and Coöperative Health organizations.

Assistant Attorney-General Thurman Arnold has charged that doctors in the District of Columbia, through their organization, the District Medical Society, an affiliate of the American Medical Association, have hampered physicians associated with the Group Health Association.

They have been "coercive," he charged, by threatening to expel from the Society doctors employed by the coöperative and doctors who consult with its physicians.

A Justice Department investigation of the alleged practices was started several months ago. The Department said it believed such activities constituted violations of the anti-trust statutes because the medical organizations were "restraining trade."—*Los Angeles Herald-Express,* October 17.

* * *

Government Still After the Doctors' Union

The monopoly crusade against the American Medical Association or its District of Columbia unit was so loudly proclaimed that it is an embarrassing issue for the Department of Justice to drop. The Attorney-General accordingly is moving forward against the Doctors' Trust.

This is fortunate, not because the harrying of the doctors is edifying, but because court decisions on the points involved can set precedents and settle controversial questions of far wider application than in the field of calomel and quinin.

The Government accuses the Society by its code of ethics, its control of members, and outlawry of nonconformists, of being a monopoly. But doctors are not in commerce. They sell personal service. Personal service is labor. If they are a monopoly it is because they operate under union by-laws and closed-shop rules.

It is to the public interest that the courts rule upon the issues put forward. Either the Department of Justice will be told to stop such hare-and-hounds exhibitions or there will be a clarifying of some highly controversial issues which particularly affect doctors only because a part of their job is the mending of broken heads in other arguments about union matters.—*San Francisco Chronicle,* September 26.

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Medical Inquiry Pressed by the United States

Grand Jury in Washington Calls Witnesses in Anti-Trust Investigation

Washington, October 18 (UP).—The Government called its first group of witnesses today before a special Grand Jury in an attempt to prove that the American Medical

Association and the District of Columbia Medical Society have violated anti-trust laws.

Behind locked doors the twenty-three-man jury will determine whether the Government's charge against the two medical organizations or any of their officers should be carried to Criminal Court for trial.

"RESTRAINT OF TRADE"

The Government alleges that organized medicine, in its attack on Group Health Association, a coöperative medical organization of Government employees, has acted "in restraint of trade" in violation of anti-trust laws.

Late yesterday the Government called as its first witness, Dr. Hugh Cabot, Mayo Clinic surgeon, who declared last July that medical practices in many sections of the country are "medieval." He repeated the statement to reporters before he entered the jury room.

His opinion, Doctor Cabot said, was based on personal investigation and many years of observation. He regards the problem of medical care for low and middle income families as one to be solved "by the community" and one which "cannot be remedied by the doctors themselves."

PATIENTS ARE CUSTOMERS

"In my opinion, the people whom doctors call patients are the same as customers and should have something to say about the price they pay for the services they receive," Doctor Cabot said.—*San Francisco News,* October 18.

* * *

Doctors to Fight

When the Department of Justice announced its intention to obtain an indictment of the American Medical Association as a monopoly it cut out a pretty tough job. The people of the country have their own opinions about doctors, and no one is more respected and esteemed than the family doctor.

The present Administration has made a bad start in singling out doctors as "monopolists" because every family doctor is a business institution all by himself, no matter whether he belongs to a lodge of Masons, Elks, or a local medical society.—*Stockton Independent,* September 29.

FARM SECURITY ADMINISTRATION: MEDICAL AID PROGRAM FOR LOW-INCOME FARMERS

The Farm Security Administration announced recently that, with the coöperation of the state medical associations and other professional groups of North and South Dakota, it has worked out plans to provide emergency medical care for eligible low-income farm families of the two states at a cost of $2 per month per family.

Dr. W. W. Alexander, Administrator, said the medical aid plans for North and South Dakota were based upon the experience of the FSA with similar plans in these and sixteen other states. Already, he said, 58,000 low-income farm families are being helped to obtain medical care at a cost they can afford through the coöperation of state medical associations in those states.

The state-wide programs in North and South Dakota, which should increase this total to more than 80,000 families, are scheduled to go into operation on November 1, Doctor Alexander said. They have been approved by Dr. R. C. Williams, Medical Director of the FSA, and the state medical, dental, pharmaceutical, nursing and hospital associations of the two states.

About 37,000 families in North Dakota and 40,000 in South Dakota, or about half the farm families of each state, will be eligible to participate, Doctor Alexander announced. He said the plan would be open to all families who are now being, or have been, aided by the Farm Security Administration.

The Administrator said the FSA would loan to each family signing up for the medical aid program $16, or the equivalent of $2 per month for the rest of this year. This money will be placed in the hands of special corporations in each state composed of federal and state officials and members of the state medical associations.

The fund will be allocated by each corporation on a prearranged basis between physicians, dentists, hospitals, pharmacists, and nurses. It also will be divided into equal sums for the eight months covered by the program.

Families signing up for the program will then be eligible for emergency medical, dental, or hospital care from any members of the professional organizations. Bills for the services will be paid by the state corporations set up under the plan, and if the funds available for a given month are not sufficient to cover the bills they will be prorated.

In each state an officer nominated by the professional organizations, but paid by the state health departments, will serve as general medical supervisor and arbitrator. One of his duties will be to check the bills submitted by the professional practitioners to prevent excessive and unnecessary charges.

The South Dakota plan will not become operative, Doctor Alexander said, until 20,000 families sign up for the service. Already 25,000 families in North Dakota are participating in a program which is being superseded by the new plan.

Doctor Alexander explained that the Farm Security Administration had embarked upon medical-aid programs in the Dakotas and sixteen other states because it had found medical attention was required in its efforts to rehabilitate low-income farm families and make them self-supporting.

"Quite aside from any humanitarian purpose," he said, "the Farm Security Administration has found, as a lending agency, that a family in good health is a better credit risk than a family in bad health. It has developed plans for medical care because it has found that good health is a necessary part of a family's rehabilitation."

Plans developed by the FSA in other states to provide medical care for its borrowers are similar but on a smaller scale than those provided in North and South Dakota, Doctor Alexander said. In all cases they have been worked out only after understandings have been reached with state and local medical associations.

In some cases, the funds in the hands of trustees are kept separate for each family. Doctor Alexander said, however, that experience with the two plans clearly indicates that for low-income families the program being applied in the Dakotas is preferable. In case of catastrophic illness it is impossible for any family in this income level to pay individually for hospitalization and special medical care without financial ruin; yet it is unfair to ask a physician to handle such cases on the nominal fees available.

The pooling of funds, he added, serves as a form of voluntary insurance against disaster for the patient and against unreasonable hardship for the doctor.

The medical aid plans, Doctor Alexander said, have encouraged a sane acceptance of more effort in the way of preventive medicine. In many areas, local physicians have served the families with little or no compensation and families have postponed requests for medical aid, while ailments grew more serious because of unpaid debts.

In general, Doctor Alexander said, physicians are pleased with the program. Most of the families aided have in the past been unable to pay anything, but are now able to pay at least a part, if not the full amount, due.

Doctor Alexander said county-wide plans are now in operation in 56 of Arkansas' 75 counties; in 13 counties in Missouri; 12 counties in Mississippi; 9 in Texas; 5 in Alabama, Georgia, and Ohio; 4 in Tennessee; 3 in Indiana and Oklahoma; and 2 in Iowa. Agreements have been reached with state medical associations in North Carolina,

Wisconsin, Utah, New Mexico, and Colorado. Plans are under way to approach local medical associations in those states.

The prolonged drought in North and South Dakota have made state-wide plans necessary. The influx of migrants from the "dust bowl" area into California has required setting up a special medical care program in that state, also.

SAN FRANCISCO MUNICIPAL HEALTH SERVICE SYSTEM

Group Health in Effect for San Francisco City Workers

Twelve Thousand Individuals Have Burdens of Expensive Care Taken From Shoulders

Lifted from the shoulders of 9,500 city employees and 2,500 of their dependents today was the specter of prolonged illness with expensive doctor and hospital costs.

The twelve thousand individuals were members of the Health Service System of San Francisco, and for the payment of small monthly sums were guaranteed the best medical and hospital attention the city affords.

As the group health insurance plan went into operation the Health Service Board was already looking ahead to the day when service could be expanded to include dental care and other services.

Virtually all illness and operations were provided for under the present plan, to which each employee contributes $2.50 a month, 25 cents of which goes to maintain the Health Service Board.

For each dependent over eighteen years of age they pay $2.25 a month, and if a family has one child under eighteen coming in under the plan, the charge is $1.50. For larger families the charge is $1 per child.

SELECTION OF ONE THOUSAND PHYSICIANS

The members of the plan can select their physicians and surgeons from a panel of one thousand doctors, which is being expanded rapidly, and can choose any major hospital in San Francisco, with the exception of Stanford University Hospital.

Jesse B. Cameron, secretary, reported scores of reservations have been made for treatment of illnesses of long standing and that these requests have been turned over to Dr. Walter B. Coffey, Medical Director.

FUNDS PROTECTED

"To assure an equitable trial period, Doctor Coffey has been authorized to postpone hospitalization of any case for six months," Mr. Cameron said. "This does not mean we will not accept cases immediately, but is a safeguard against a possible but unlikely depletion of our surplus funds."

Income of the system averages $30,000 a month now and is expected to be materially increased in the near future as more dependents of employees come under the plan. They have until November 15 to join without taking a physical examination first.—*San Francisco News*, October 1.

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San Francisco City Employees Are a Robust Lot

The first few days of operation of their new health service system, which has attracted nation-wide attention, have shown San Francisco municipal employees to be a healthy lot, according to Dr. W. B. Coffey, Medical Director of the system.

Contrary to expectation, no rush of applications for operations or hospital service developed when the system started on October 1. Hospitalization has been under the estimates of Doctor Coffey for normal operations.

Two offices are operated by the system, which furnishes medical and hospital services to some 9,500 employees and 2,000 dependents for $2.50 per month for adults, $1 a month for children.

THE BUSINESS OFFICE

The business office, managed by Jesse B. Cameron, System Secretary, is at the City Hall. It receives employee contributions through collections by the controller, pays the bills, handles applications. Medical headquarters are maintained at 909 Hyde Street, with Doctor Coffey in charge.

At Doctor Coffey's offices each morning's mail brings reports from physicians who have served members. About one thousand doctors are on the panel, having agreed to a fee schedule, a "unit" system for computing pay for services and other regulations. A member of the System has free choice of doctor or hospital. All but one of the city's major hospitals are on the list.

NO RED TAPE

For the employee-member there is no red tape, though out of his sight there is a thorough system of reports and records that permits the Medical Director to see what is going on.

From the doctors' and hospital reports daily reports to Doctor Coffey are made up. Yesterday's showed fifty-five new cases of illness, six old cases terminated, 175 cases still under treatment.

One member had been hospitalized, two discharged from hospitals, leaving seven in hospital beds. Hospital days during the month to date were thirty-two. There had been 150 office visits to doctors, seventeen house visits by doctors during the five days, seven minor operations, five major ones.

Doctor Coffey, in estimating service costs in advance, had figured on one thousand hospital days per month for the employee group. A rush for treatment of chronic ailments was deemed possible. The actual figures are below the normal expectation.

GOING SMOOTHLY

"Everything has gone smoothly thus far," said Doctor Coffey. "There is no reason why that should not continue. We are scrupulous in avoiding any recommendations of doctors. They maintain their right to attract patients through good service. The doctor-patient relation is maintained. The business office, run by laymen, does not interfere with the medical end of the System.

"I am confident physicians, hospitals, and employees will like the arrangement more as it goes along. It puts medical and hospital services within employees' means by spreading the cost. There is no restriction on the patient's freedom of choice or on any ethical doctor's right to serve members of the group who want his services."

Doctor Coffey said inquiries about the local plan had been received from many places and from as far away as Washington.—*San Francisco Chronicle*, October 6.

SOUTHERN CALIFORNIA MEDICAL CARE PLAN

Hospital and Doctor's Service for Low Wage Earners Foreseen

Inauguration of a nonprofit hospital-medical service in the Southland for the special benefit of low-bracket wage earners was foreseen yesterday for the near future by Ritz E. Heerman, President of Associated Hospital Service of Southern California, and also superintendent of California Hospital, following his return from Dallas, Texas, where he attended the national convention of the American Hospital Association.

"Nonprofit hospital-medical service for wage earners formed one of the major themes of the convention, which

was attended by representatives of the American Medical Association, the Social Security Board of Washington, D. C., and virtually every major hospital and hospital association in the United States," said Heerman.

PRESSURE STRONG

"Speaking for the Government, Arthur J. Altmeyer, Chairman of the Social Security Board, and Louis S. Reed, also of the Board, declared that the public pressure which is being exerted upon the Government for a more widely beneficial and advanced type of hospital service is of a character that no longer can be ignored.

"These Government spokesmen were most fair in their attitude toward hospitals, declaring that many institutions have gone far toward solving existing problems by voluntarily introducing group hospitalization.

"Both speakers assured convention delegates that the Government entertains no plans for engaging in a program that would be in competition with voluntary institutions, particularly those which have a nonprofit plan in operation or under serious consideration."

PARTIAL SOLUTION

Heerman added that the Government spokesmen expressed the opinion, however, that the nonprofit service plan in operation in various parts of the country only partially solves present problems, and that the entire program will receive new impetus when a coördinated group medical service plan is placed in operation.

"A plan of this type is being considered by medical groups throughout the United States, especially in Southern California, following a meeting of the House of Delegates of the American Medical Association on September 16, when it fully approved the nonprofit hospital group plans now functioning under the joint direction of hospital and medical men."

FULL SERVICE PLANNED

Heerman said that plans are now under consideration for institution of a combined prepayment hospital-medical service throughout the Southland.

"In some of the rural communities we will encounter cases where unfortunate groups will be financially unable to subscribe to the plan. In such instances the Federal Government has indicated a method probably will be advanced whereby these groups will be able to have the same nonprofit medical-hospital benefits that are enjoyed by other classes of society."

Heerman said that several local medical societies are surveying the situation and that leaders in the group hospital plan have expressed their willingness to offer the medical fraternity their coöperation as soon as a workable program has been formulated.—*Los Angeles Times,* October 8.

NEW YORK MEDICAL SERVICE PLAN

Doctors Propose Four-Cent-a-Day Plan

Every Medical Care, Including Surgery and Specialization, Would Be Specified

A sweeping plan for providing medical care of every type, surgery and specialization included, at a cost to subscribers of four cents a day, is being developed for application to sixteen counties of New York next year, it was learned yesterday.

Assemblyman Foster Piper of Buffalo has completed a tentative draft of enabling legislation to be introduced at Albany in January, in what was termed a strong attempt to clear the way for relief alike of doctors and their patients. Meanwhile, the Kings County Medical Society has established a nucleus for the "Associated Medical Service of New York—a mutual nonprofit coöperative association to facilitate employment of medical service."

Dr. Frederic E. Elliott, secretary-treasurer, said the object was "insurance against unusual and costly" doctors' bills. Ailments involving less than $10 expense to the patient will not be covered by the plan, but any other disease or operation would be handled through an annual subscription of $14.60.

RESEMBLES HOSPITAL PLAN

The plan resembles that of the Associated Hospital Service of New York, which was authorized by special legislation three years ago. The latter operates on a three-cent-a-day basis and offers hospitalization for stated periods. If the project covering physicians and surgeons also goes into effect, complete protection against a serious emergency may be obtained for $24.60 yearly.

Mr. Piper's enabling clause, under the State Insurance Law, is expected to be in part as follows: "A membership corporation may be organized to function as a consumers' coöperative stock corporation, or a medical expense indemnity, or a hospital service for persons who become subscribers. Medical expense indemnity shall consist of reimbursement for medical care provided through duly licensed physicians and furnishing the necessary appliances, drugs, medicines, and supplies."

No one service would be allowed to combine medical and hospital care and all are to be strictly nonprofit making. Fraternal benefit societies and coöperative life and accident insurance companies are to be excluded from provisions of the measure.

NEW APPROACH PLANNED

The approach to the problem will differ from that of the Coöperative Health Association of New York, a member of the Association of Medical Coöperatives, which stopped enlisting subscribers recently after a warning from Attorney-General John J. Bennett, Jr., that its activity probably was illegal. According to State law no third agency may come between a physician and his patient.

Theoretically, in consumers' coöperatives the physicians are under contract to the corporation, whereas in medical expense indemnity there is a personal obligation to the patient. The indemnity idea depends on the participation of virtually all doctors. The consumers' coöperation stock corporation mentioned by Mr. Piper would be authorized to sell medicinal products but no professional services.

Dr. Charles H. Goodrich, president last year of the New York State Medical Society, is a member of the Medical Advisory Board of the proposed service. Serving with him are: Dr. Thomas M. Brennan, Dr. John E. Jennings and Dr. Harvey B. Matthews, all past Kings County Society presidents; Dr. Philip I. Nash, Kings president-elect; Dr. Alec N. Thomson, Kings medical director; and Dr. Alfred E. Shipley, former Deputy Commissioner of Hospitals. The application for certificate of incorporation has been drawn and signed by Dr. John B. D'Albora, Dr. John L. Bauer, Dr. Irving Gray, Dr. John J. Masterson, and Dr. Elliott.

The September issue of the *Kings County Medical Society Bulletin* will contain an editorial, describing the proposal and ending:

"There must be some concrete evidence that this enterprise will receive general acceptance and coöperative support of the medical profession. To this end, within the next few days, each physician in Kings County will receive a communication from the Association with an enclosed reply post card. . . . A vast amount of detail must be accomplished before the Association can actually enroll physician members."—*New York Times,* September 17.

TWENTY-FIVE YEARS AGO†

EXCERPTS FROM OUR STATE MEDICAL JOURNAL

Vol. XI, No. 11, November, 1913

From Some Editorial Notes:

Of Utmost Importance!—For your own benefit and protection, please remember these facts:

The large majority of suits for damages for alleged malpractice which we are called upon to defend, are based upon an alleged improper treatment of a fracture.

In every case of fracture that comes to you for professional treatment, see that an x-ray plate is made and that you keep it in your possession; do not give it to the patient.

Whenever possible, have some other physician see the patient with you, make a careful examination of the fracture, and be able to testify that it was properly set and bandaged.

Use the fluoroscope if you like, but, in addition, be sure to have a plate made; it will remain a permanent record of the condition at the time it was taken.

In two instances where suits were brought, the member had thoughtlessly given the x-ray plates to the patient and, of course, the patient would not produce them; they were "lost."

In 1896, Doctor Jones gave a demonstration of the then very new x-ray or roentgen rays before the San Francisco County Medical Society. In the course of his remarks he expressed the opinion that the time would come when any physician who treated a fracture case without making an x-ray examination of it would render himself liable to a suit of damages. Many of those present ridiculed this opinion and one went so far as to deplore the discovery of the x-rays, saying that they would make surgeons less careful and less skilful. Carelessness in this regard—not taking and keeping an x-ray plate—has cost the Society $4,000 in the defense of suits which came about more or less as predicted.

To put it graphically, this carelessness has cost each individual member almost two dollars, for the money for defense comes out of our pockets; the more the work costs the Society, the higher is the required assessment.

Have an x-ray plate made in every case of fracture.

Keep the plate—do not give to the patient.

Have a consultant if possible.

These things are for your own protection, and a little care and thought may keep you from a great deal of trouble and loss of time and annoyance in the future. . . .

* * *

Where Does the "Physician" Come In?—It is a well-recognized fact that the profession of medicine is a most unselfish one. Medical men are continually striving along lines of prophylaxis, with results which have already greatly impaired the income of the profession as a whole. And now, assisted by various hospital organizations and laboratories, the public may soon be taught to get along almost entirely without the services of so-called diagnosticians and therapeutists. In these days of self-starting automobiles, pianolas, victrolas, of blood transfusions and tissue transplantations, self-administered anesthesias and self-performed operations, it is rather gratifying to stop and consider the advances made by the laboratory worker along the lines of diagnosis, thus enabling the patient to decide accurately for himself as to what ails him. . . .

* * *

Uniform Membership.—When medical societies were few in number and small in membership and had no direct rela-

(Continued in Front Advertising Section, Page 15)

† This column strives to mirror the work and aims of colleagues who bore the brunt of Association activities some twenty-five years ago. It is hoped that such presentation will be of interest to both old and new members.

BOARD OF MEDICAL EXAMINERS OF THE STATE OF CALIFORNIA†

By CHARLES B. PINKHAM, M.D.
Secretary-Treasurer

News Items

"The State Board of Medical Examiners announces that 172 of 174 applicants had passed the examination for physicians and surgeons recently held in San Francisco. Only two fell short of the high grade of 75 per cent required and these two would doubtless have met any less stringent standard. On the same day, eleven out of fourteen met the requirements for the much more limited art of chiropody. There has never been an examination for admission to the Bar of California, since the present examination system was established, on which anything approaching this proportion of success was reached. It would be a rare examination which even half of the applicants passed. And this is not because the standards for lawyers are higher than those for physicians, or the examinations are more difficult. The exact contrary is the case. If the preliminary training of aspirants to the Bar were uniformly as high as that in medicine, most of the candidates would pass, too. In fact, nearly all of those who have this training do pass. The difference is that there are now no medical schools but Class A schools; they admit none but highly selected university graduates, and they permit only those to remain in medical school who show the necessary ability and diligence. Naturally, the survivors of this process pass the State examinations also, with few or no exceptions. If the law is ever to be in fact what it has always been in name, a 'learned' profession, the same standards of preparation will have to be required of aspirants to it. The question still remains whether the law should be a learned profession. Curiously enough, there are two opinions in this. There is only one as to medicine." (Editorial from San Francisco *Chronicle*, August 29, 1938.

"The California State Supreme Court yesterday frowned again on the Pacific Health Corporation, Inc.'s contention it performed a legal service because its physicians were in independent practice. The court denied, without comment, the health organization's petition for rehearing of a decision which previously condemned its group medical insurance program as a violation of the Medical Practice Act." (Associated Press dispatch, dated San Francisco, September 30, printed in the Los Angeles *Herald-Express*, September 30, 1938.)

"The State Supreme Court, which recently held the activities of the Pacific Health Corporation were in violation of the Medical Practice Act, yesterday granted a stay of judgment to the health insurance firm pending an appeal of the case to the United States Supreme Court." (San Francisco *Examiner*, October 5, 1938.)

"One of the weeklies recently carried an article, in the form of an interview, by a New York physician who says that doctors as a class do not know what they are doing. . . . Well, we read the article and hoped that the doctor—he is Dr. Edward Spencer Cowles—would enlighten us a little on the subject. But he failed to do so. . . . Doctor Cowles attacks the doctors without indicating that he knows much more than other members of his profession, if as much. . . . We do not think that this New York specialist has manifested in his article a good spirit. . . . When a doctor begins to abuse the members of his profession on the score of their

(Continued in Front Advertising Section, Page 23)

† The office addresses of the California State Board of Medical Examiners are printed in the roster on advertising page 6.